

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 7/17/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
10.00	29

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
4,787.00	1.60	46.20	4,784.84	111.97	51.70	111.97	0.49
4,881.00	1.60	46.90	4,878.80	113.77	53.61	113.77	0.02
4,976.00	1.40	46.90	4,973.77	115.47	55.42	115.47	0.21
5,071.00	1.40	45.20	5,068.74	117.08	57.09	117.08	0.04
5,105.00	1.30	42.90	5,102.73	117.66	57.65	117.66	0.33

**Daily Summary**

Report Start Date 7/17/2017 06:00	Report End Date 7/18/2017 06:00	Footage (ftKB) 90.00	End Depth (ftKB) 5,165.0	Daily Field Est Total (Cost) 19,612.00	Cum Field Est To Date (Cost) 296,547.62
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Activity  
CEMENTING 9 5/8 CASING

**24hr Activity**

Com
ROTATE F/ 5075' TO 5165' WOB-30, ROP-58, ROT-85, SPM-120/120, PSI-3600, DIFF-225, GPM-770, TQ.-9K CIRC SWEEP AROUND & COND HOLE TO RUN CASING SPOT 100 BBLs. HIGH VISC PILL AND PUMPED SLUG POOH L/D 8" DC'S L/D 2-8" RR , 1-8" NMDC , MWD , FS, 1-9 5/8" MOTOR , PDC BIT HOLD PRE JOB SAFETY MTG W/ BUTCH'S , SCANDRILL , WEATHERFORD & XTO REP , RIG UP BUTCH'S CASING TOOLS W/ EXTENSION BAILS  RAN 9 5/8" CASING AS FOLLOW'S: 1 - 9 5/8" FLOAT SHOE (1.67'), 2 - JTS OF 9 5/8" 40# J-55 LTC (84.33'), 1 - 9 5/8" FLOAT COLLAR (1.27'), 90 - JTS OF 9 5/8" 40# J-55 LTC (3,795.05.30'), 1 WEATHERFORD DV TOOL ( 2.67 ) 31 - JTS OF 9 5/8" 40# HCL-80 LTC (1,285.52) TOTAL PIPE 5,167.17' SET @ 5164'.  WASH 2 JOINTS OF 9-5/8" CASING TO BOTTOM CIRCULATE CASING ON BOTTOM , RIG DOWN CASING CREW HOLD PRE JOB SAFETY MTG W/ HALLIBURTON , WTHFD , SCAN DRILL & XTO REP. RIG UP CEMENTERS HOLD PRE JOB SAFETY MTG W/ HALLIBURTON , WTHFD , SCAN DRILL & XTO REP .PUMP FIRST STAGE CEMENT AS FOLLOWS: TEST LINES @ 3000 PSI. PUMP 20 BBLs. GEL SPACER, 885 BBLs. LEAD CEMENT 2555 SXS + 3 LBM/SK KOL-SEAL + 0.1250 LBM/SK POLY-E-FLAKE + 0.65% HR-800 @ 12.8 PPG YIELD 1.947, WATER 10.33 GAL/SK. AND 119 BBLs. OF TAIL CEMENT 505 SXS @ 14.8 PPG, YIELD 1.332, WATER 6.42 GAL/SK. LOAD PLUG IN HEAD WITNESSED BY XTO REP. DISPLACED W/ 385 BBLs. OF FRESH WATER



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### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
4,787.00	1.60	46.20	4,784.84	111.97	51.70	111.97	0.49
4,881.00	1.60	46.90	4,878.80	113.77	53.61	113.77	0.02
4,976.00	1.40	46.90	4,973.77	115.47	55.42	115.47	0.21
5,071.00	1.40	45.20	5,068.74	117.08	57.09	117.08	0.04
5,105.00	1.30	42.90	5,102.73	117.66	57.65	117.66	0.33

### Daily Summary

Report Start Date 7/18/2017 06:00	Report End Date 7/19/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 5,165.0	Daily Field Est Total (Cost) 137,503.35	Cum Field Est To Date (Cost) 482,250.97
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Activity  
PREP FLOOR FOR TRIP

### 24hr Activity

Com

FINISHED FIRST STAGE HAD FULL RETURNS NO CEMENT BACK BUMPED PLUG W/ 1650# OK BLED BACK 2.5 BBLS. FLOATS HELD, DROPPED BOMB FOR DV TOOL AND OPEN SAME W/ 490# CIRC

CIRC THRU DV TOOL W/ RIG PUMP

HELD PJSM AND PUMPED SECOND STAGE AS FOLLOWS 20 BBLS. WATER BASED SPACER GEL SPACER, 950 SXS HALCEM SYSTEM @ 14.8 PPG YIELD 1.332 MIX WATER RATIO 6.42 GAL/SX. DISPLACED WITH 87 BBLS. OF FRESH WATER W/ FULL RETURNS GOT BACK 80 BBLS OF CEMENT BUMPED PLUG W/ 2000# BLED BACK 1 BBL FLOATS HELD

R/D HALLIBURTON

NIPPLE DOWN CONDUCTOR, FLOWLINE AND TURNBUCKLES

MADE ROUGH CUT ON CASING AND L/D CASING AND CONDUCTOR AND MOUSE HOLE

SPLIT CONDUCTOR DUE TO BEING FULL OF CEMENT

MADE FINAL CUT ON 9 5/8 CASING

INSTALL AND WELD CASING HEAD AND TEST SAME TO 900 PSI OK

INSTALL 57" 13 5/8" 10M X 11" 5M SPACER SPOOL, NIPPLE UP 13 5/8" 10M BOPS AND CHOKE LINES, FLARE LINE, FLARE STACK. INSTALL ANACONDA LINE AND ACCUMULATOR HYDRAULIC LINES, FUNCTION TEST BOPS ( POSITIVE TEST, NO ISSUES)

INSTAL BELL NIPPLE W/ ROTATING HEAD BOWL

HOLD PRE JOB SAFETY MTG W/ LONESTAR TESTERS, SCAN DRILL AND XTO REP. R/U LONESTAR TESTER

TEST CHOKE MANIFOLD 2" ,4" AND RELATED VALVES 250 PSI LOW 5000 PSI HIGH. TEST TOP DRIVE, 4" STAND PIPE AND PUMP VALVES 250 LOW 5000 HIGH. TEST IBOP, TIW VALVE 250 LOW 5000 HIGH. TEST PIPE RAM'S, BLIND RAM'S, 250 LOW, 5000 HIGH. TEST ANNULAR 250 LOW, 3500 HIGH. ALL TEST POSITIVE AND CHARTED, NO ISSUES

TEST 9 5/8" CASING & TOP OF DV TOOL T/ 1500 PSI FOR 30 MINUTES ( POSITIVE TEST AND CHARTED

RIG DOWN TESTER

INSTALL FLO-LINE AND KILL LINE. CENTER AND SNUB OFF BOP

INSTALL CORROSION RING AND PREP FLOOR FOR TRIP



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Mud Properties	
Dens (lb/gal)	Vis (s/qt)
9.40	29

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 7/13/2017	Description	EW Tie In (ft) 0.00	NS Tie In (ft) 0.00	Azimuth Tie In (°) 0.0	Inclination Tie In (°) 0.0	MD Tie In (ftKB) 0.00	TVD Tie In (ftKB) 0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
5,289.00	1.40	63.70	5,286.68	120.18	61.09	120.18	0.27
5,384.00	1.30	55.90	5,381.66	121.30	63.02	121.30	0.22
5,479.00	1.20	56.60	5,476.63	122.45	64.74	122.45	0.11
5,573.00	1.10	52.90	5,570.61	123.54	66.28	123.54	0.13
5,668.00	1.10	52.90	5,665.60	124.64	67.74	124.64	0.00

Daily Summary			
Report Start Date 7/19/2017 06:00	Report End Date 7/20/2017 06:00	Footage (ftKB) 565.00	End Depth (ftKB) 5,730.0
Activity DRILLING INTERMEDIATE		Daily Field Est Total (Cost) 45,345.92	Cum Field Est To Date (Cost) 527,596.89

24hr Activity
Com
P/U AND M/U BIT SUB AND BIT TIH TO 1130' TAGGED CEMENT DRILLED CEMENT AND DV TOOL CIRC SWEEP AROUND TIH TO 5077' TEST CASING TO 1500# FOR 30 MIN. DRILL OUT FLOAT COLLAR CEMENT AND SHOE ROTATE F/ 5165' TO 5175' TEST FORMATION TO 107# EQV. TO 10.0 PPG GOOD TEST SLUG PIPE AND POOH FOR DIRECTIONAL BHA BREAK BIT AND BIT SUB. L/D SAME P/U 6 3/4" 7/8 , 5:0 STAGE WEATHERFORD MTR W/ MUD SLEEVE , 6 1/2" UBHO , 6 1/2" NMDC , INSTALL MWD , ORIENT TOOL AND SURFACE TEST ( POSITIVE TEST FINISH PICKING UP BHA AND STAGE IN HOLE W/ WELLBENDER DIRECTIONAL TOOLS WASH TO BOTTOM F/ 5150 T/ 5175 ROTATE F/ 5175' TO 5730' (555) WOB-28, ROP-158, SPM-105/105, PSI-3550, DIFF-400, RPM-85, MTR RPM-180, GPM-675, TQ.-7K



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Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.50	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
7,278.00	0.70	0.80	7,275.40	141.76	84.38	141.76	0.33
7,372.00	0.70	350.10	7,369.40	142.90	84.29	142.90	0.14
7,467.00	0.50	342.00	7,464.39	143.86	84.06	143.86	0.23
7,561.00	0.60	300.70	7,558.39	144.51	83.51	144.51	0.42
7,656.00	0.50	306.80	7,653.38	145.01	82.75	145.01	0.12

### Daily Summary

Report Start Date 7/20/2017 06:00	Report End Date 7/21/2017 06:00	Footage (ftKB) 2,022.00	End Depth (ftKB) 7,752.0	Daily Field Est Total (Cost) 20,786.57	Cum Field Est To Date (Cost) 548,383.46
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Activity  
DRILLING INTERMEDIATE

### 24hr Activity

Com
ROTATE F/ 5730' TO 6949' WOB-25, ROT-85, ROP-116, SPM-105/105, PSI-3000, DIFF-350, GPM-600, TQ.-8K
SERVICE RIG
ROTATE F/ 6949' TO 7139' (190) 76 FPH WOB-25, ROT-85, SPM-105/105, PSI-3000, DIFF-350, GPM-600, TQ.-8K
INSTALL ROTATING ELEMENT
ROTATE F/ 7139' TO 7752' (613) 61.3 FPH WOB-30, ROT-85/ MTR RPM 182, TOTAL RPM 267, SPM-95/95, OFF BTTM PSI-3000, ON BTTM PSI 3250, DIFF-250, GPM-650, TQ.-8K



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Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.40	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
8,129.00	0.30	328.80	8,126.37	147.55	81.00	147.55	0.19
8,224.00	0.30	292.80	8,221.37	147.86	80.64	147.86	0.20
8,318.00	0.30	279.40	8,315.37	147.99	80.17	147.99	0.07
8,413.00	0.40	280.50	8,410.37	148.09	79.60	148.09	0.11
8,506.00	0.50	276.90	8,503.36	148.20	78.88	148.20	0.11

### Daily Summary

Report Start Date 7/21/2017 06:00	Report End Date 7/22/2017 06:00	Footage (ftKB) 867.00	End Depth (ftKB) 8,619.0	Daily Field Est Total (Cost) 18,266.00	Cum Field Est To Date (Cost) 564,088.46
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Activity  
DRILL INTERMEDIATE @ 8,619'

### 24hr Activity

Com
DRILL ROTATE WITH SURVEY'S F/7,752' T/8,179', 427' @ 40.7 FT/HR . WOB 32, RPM 85, MMRPM 170, TOTAL RPM 255,TQ: 12/13 K, SPP 3035, DIFF. 200, GPM 608, MMRPM 170.
SERVICE RIG, TOP DRIVE, GREASE CROWN.
DRILL ROTATE WITH SURVEY'S F/8,179' T/ 8,460', 291' @ 41.5 FT/HR . WOB 32, RPM 85, MMRPM 170, TOTAL RPM 255,TQ: 12/13 K, SPP 3035, DIFF. 200, GPM 608.
BLEW HYDRAULIC HOSE TO IBOP. UNABLE TO REPAIR BY PASS LINES TO IBOP UNTIL PROPER PARTS AND FITTINGS ARE ORDERED
DRILL ROTATE WITH SURVEY'S F/8,460' T/ 8619', 159' @ 45.4 FT/HR . WOB 32, RPM 85, MMRPM 170, TOTAL RPM 255,TQ: 12/13 K, SPP 2890, DIFF. 200, GPM 608.



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Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.30	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
8,506.00	0.50	276.90	8,503.36	148.20	78.88	148.20	0.11
8,601.00	0.60	278.80	8,598.36	148.33	77.98	148.33	0.11
8,695.00	0.80	290.50	8,692.35	148.63	76.88	148.63	0.26
8,789.00	1.00	308.20	8,786.34	149.37	75.62	149.37	0.36
8,882.00	1.60	324.40	8,879.32	150.93	74.22	150.93	0.75

### Daily Summary

Report Start Date 7/22/2017 06:00	Report End Date 7/23/2017 06:00	Footage (ftKB) 374.00	End Depth (ftKB) 8,993.0	Daily Field Est Total (Cost) 38,274.08	Cum Field Est To Date (Cost) 602,362.54
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Activity  
TRIP IN HOLE @ 8361'

### 24hr Activity

Com
DRILL ROTATE WITH SURVEY'S F/8,619' T/8,932', 313' @ 39 FT/HR . WOB 35, RPM 85, MMRPM 170, TOTAL RPM 255,TQ: 13/15 K, SPP 2890, DIFF. 200, GPM 608.
SERVICE RIG AND TOP DRIVE
REPAIR AND CHANGE OUT FITTINGS ON HYDRAULIC IBOP.
DRILL ROTATE WITH SURVEY'S F/8,932' T/8,993', 61' @ 40.7 FT/HR . WOB 35, RPM 85, MMRPM 170, TOTAL RPM 255,TQ: 13/15 K, SPP 2890, DIFF. 200, GPM 608. { PENATRATION RATE DROPPED TO 20 FT/HR}.
CIRCULATE AND FILL TRIP TANK
POOH F/8,993 T/8,068'. HOLE TAKING PROPER FILL ON TRIP TANK.
PULL ROTATING HEAD ELEMENT, INSTALL TRIP NIPPLE.
POOH F/8,068 T/703'. HOLE TAKING PROPER FILL ON TRIP TANK.
RACK BACK BHA , REMOVE MWD , DRAIN MOTOR , B/O BIT LAY DOWN MOTOR AND BIT.( PULLED SLICK OFF BOTTOM , HOLE TAKING PROPER FILL ON TRIP TANK , NO ISSUES) BEARING ASSEMBLY ON MTR HAD SLACK IN BIT BOX, ( FUNCTION TEST BOPS)
BUILD AND PROGRAM NEW MWD TOOL. PICK UP 1.50° WEATHERFORD MUD LUBE 6 3/4" FIXED MUD MOTOR, 7:8 LOBE, 5.0, STAGE, 0.28 REV/GAL. BTB 6.3', BTS 50'. M/U UBHO, INSTALL MULE SHOE, SCRIBE MOTOR. M/U MONEL, INSTALL MWD AND SURFACE TEST SAME. {OK}. MAKE UP ULTERRA 8 3/4" U716M SER. # 34268.
TIH W/BHA PICKING BACK UP STABILIZER'S AND SHOCK SUB T/ 8361'. {HOLE GIVING PROPER DISPLACEMENT ON TRIP}



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### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.40	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017	MWD	0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
8,882.00	1.60	324.40	8,879.32	150.93	74.22	150.93	0.75
8,976.00	2.60	337.80	8,973.25	153.97	72.65	153.97	1.18
9,071.00	1.30	341.70	9,068.20	156.98	71.50	156.98	1.37
9,165.00	1.40	316.10	9,162.17	158.82	70.37	158.82	0.64
9,260.00	1.50	309.60	9,257.14	160.45	68.61	160.45	0.20

### Daily Summary

Report Start Date 7/23/2017 06:00	Report End Date 7/24/2017 06:00	Footage (ftKB) 317.00	End Depth (ftKB) 9,310.0	Daily Field Est Total (Cost) 27,300.00	Cum Field Est To Date (Cost) 629,662.54
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Activity  
TRIP IN HOLE @ 7,508'

### 24hr Activity

Com
TIH F/8,361' T/8,932'. PULL TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT. WASH AND REAM F/8,932' T/8,993'. DRILL ROTATE WITH SURVEY'S F/8,993' T/9,026', 33' @ 33 FT/HR . WOB 25, RPM 85, MMRPM 154, TOTAL RPM 239,TQ: 12/13 K, SPP 2400, DIFF. 250, GPM 550 SLIDE F/9,026' T/9,056', 30' @ 20 FT/HR . WOB 25, MMRPM 154, SPP 2400, DIFF. 300, GPM 550, TF 160. DRILL ROTATE WITH SURVEY'S F/9,056' T/9,215', 159' @ 31.8 FT/HR . WOB 32, RPM 85, MMRPM 154, TOTAL RPM 239,TQ: 12/13 K, SPP 2545, DIFF. 200, GPM 550 SERVICE RIG, TOP DRIVE, GREASE CROWN. DRILL ROTATE WITH SURVEY'S F/9,215' T/9,310', 95' @ 31.7 FT/HR . WOB 35, RPM 85, MMRPM 154, TOTAL RPM 239,TQ: 12,500/14,800 K, SPP 2545, DIFF. 200, GPM 550. { PENATRATION RATE DROPPED TO 5.5 FT/HR }. CIRCULATE HI VIS SWEEP TO SHAKERS , BUILD AND PUMP SLUG POOH F/ 9,310' T/ 702'. HOLE TAKING PROPER FILL ON TRIP TANK. PULL ROTATING HEAD ELEMENT, INSTALL TRIP NIPPLE. RACK BACK BHA , DRAIN MOTOR , B/O BIT LAY DOWN BIT.( PULLED SLICK OFF BOTTOM , HOLE TAKING PROPER FILL ON TRIP TANK , NO ISSUES) BEARING ASSEMBLY ON MTR HAD NO SLACK IN BIT BOX, ( FUNCTION TEST BOPS) INSPECT MWD (NO ISSUES) SURFACE TEST SAME. {OK}. MAKE UP HUGHES 8 3/4" VG-44C INSERT BIT, VG-44C SER. # 5271010. TIH W/BHA #7 PICKING BACK UP STABILIZER'S AND SHOCK SUB T/ 7,508'. {HOLE GIVING PROPER DISPLACEMENT ON TRIP}



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### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.30	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017	MWD	0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
9,260.00	1.50	309.60	9,257.14	160.45	68.61	160.45	0.20
9,355.00	2.00	307.50	9,352.10	162.26	66.33	162.26	0.53
9,449.00	2.30	293.70	9,446.03	164.01	63.31	164.01	0.63
9,554.00	2.60	272.00	9,550.94	164.94	59.00	164.94	0.92
9,594.00	2.60	272.00	9,590.90	165.01	57.18	165.01	0.00

### Daily Summary

Report Start Date 7/24/2017 06:00	Report End Date 7/25/2017 06:00	Footage (ftKB) 307.00	End Depth (ftKB) 9,617.0	Daily Field Est Total (Cost) 22,529.97	Cum Field Est To Date (Cost) 652,193.31
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Activity  
POOH F/ MOTOR @ 8,738'

### 24hr Activity

Com
PULL TRIP NIPPLE, INSTALL ROTATING HEAD ELEMENT. TIH F/7,508 T/9,215. HOLE GIVING PROPER DISPLACEMENT. FILL PIPE. WASH AND REAM F/9,215' T/9,310' DRILL ROTATE WITH SURVEY'S F/9,310' T/9,405', 95' @ 14.6 FT/HR . WOB 30, RPM 75, MMRPM 154, TOTAL RPM 229,TQ: 9425 K, SPP 2775, DIFF. 145, GPM 550. SERVICE RIG, TOP DRIVE, GREASE CROWN DRILL ROTATE WITH SURVEY'S F/9,405' T/ 9594', 90' @ 8.8 FT/HR . WOB 30, RPM 75, MMRPM 154, TOTAL RPM 229,TQ: 9425 K, SPP 2775, DIFF. 145, GPM 550. SLIDE F/9,594' T/9,617', 23' @ 11.5 FT/HR . WOB 35, MMRPM 154, SPP 2900, DIFF. 200, GPM 550, TFO 90R°. CIRCULATE AND FILL TRIP TANK TO POOH FOR MOTOR FAILURE. TOOH F/ 9,617' T/ 8,738' HOLE TAKING PROPER FILL ON TRIP TANK ( AFTER SLIDING 23' AND ATTEMPTING TO ROTATE MOTOR OFF BOTTOM PUMP PRESSURE INCREASED BY 500# 120 STKS W/ 3275# . WHILE ROTATING OFF BOTTOM PUMP PRESSURE 170 STKS W/ 2775#





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/25/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.40	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017	MWD	0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
9,355.00	2.00	307.50	9,352.10	162.26	66.33	162.26	0.53
9,449.00	2.30	293.70	9,446.03	164.01	63.31	164.01	0.63
9,554.00	2.60	272.00	9,550.94	164.94	59.00	164.94	0.92
9,594.00	2.60	272.00	9,590.90	165.01	57.18	165.01	0.00
9,645.00	1.60	300.20	9,641.86	165.40	55.41	165.40	2.76

### Daily Summary

Report Start Date 7/25/2017 06:00	Report End Date 7/26/2017 06:00	Footage (ftKB) 78.00	End Depth (ftKB) 9,695.0	Daily Field Est Total (Cost) 27,614.00	Cum Field Est To Date (Cost) 679,807.31
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Activity  
DRILL INTERMEDIATE @ 9695'

### 24hr Activity

Com
POOH F/8,738' T/3,920'. HOLE TAKING PROPER FILL ON TRIP TANK. PULL ROTATING HEAD ELEMENT, INSTALL TRIP NIPPLE. POOH F/3,920 T/113'. HOLE TAKING PROPER FILL ON TRIP TANK. LAY DOWN STABILIZER'S, SHOCK SUB. { FUNCTION BOP'S }. ATTEMPT TO DRAIN MUD MOTOR. { LOCKED UP }. BREAK BIT , PULL MWD, LAY DOWN BIT & MOTOR. STRAP AND CALIPER NEW MOTOR, STABILIZER'S, SHOCK SUB. PICK UP WEATHERFORD MUD LUBE 6 3/4" FIXED MUD MOTOR, 7:8 LOBE, 5.7 STAGE, 0.24 REV/GAL. BTB 6.3', BTS 50'. SCRIBE MOTOR. CHECK MULE SHOE, BREAK UBHO SUB, REMOVE MULE SHOE. MAKE UP UBHO SUB, INSTALL NEW MULE SHOE, M/U MONEL, RE-SCRIBE MOTOR, INSTALL MWD AND SURFACE TEST SAME. {OK}. MAKE UP SMITH 8 3/4" FH47HYODVPS SER # RJ3351. TIH W/BHA PICKING UP STABILIZER'S AND SHOCK SUB T/119'. TIH F/119' T/5,134'. HOLE GIVING PROPER DISPLACEMENT. REMOVE TRIP NIPPLE , INSTALL ROTATING HEAD ELEMENT SLIP & CUT 117' OF 1 3/8" DRILLING LINE , REPAIR SLAVE CYLINDER ON COM ( FUNCTION TEST BOP'S AND COM) MONITOR WELL ON CHOKE THROUGH SEPRATOR { CALIPER CANRIG DATA ON TOP DRIVE SET LIMITS} (NO ISSUES) SERVICE RIG & TOP DRIVE TIH F/ 5134' T/9,505'. HOLE GIVING PROPER DISPLACEMENT. FILL PIPE. WASH AND REAM F/9,505' T/9,617 WOB-10 GPM-525 , ROT-65 , PP-2450 TRQ-7500 DRILL ROTATE WITH SURVEY'S F/9,616' T/ 9695', 79 @ 15.8 FT/HR . WOB 30, RPM 75, MMRPM 132, TOTAL RPM 207,TQ: 10,300 K, SPP 2750, DIFF. 145, GPM 550.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/26/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.50	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017	MWD	0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
9,355.00	2.00	307.50	9,352.10	162.26	66.33	162.26	0.53
9,449.00	2.30	293.70	9,446.03	164.01	63.31	164.01	0.63
9,554.00	2.60	272.00	9,550.94	164.94	59.00	164.94	0.92
9,594.00	2.60	272.00	9,590.90	165.01	57.18	165.01	0.00
9,645.00	1.60	300.20	9,641.86	165.40	55.41	165.40	2.76

### Daily Summary

Report Start Date 7/26/2017 06:00	Report End Date 7/27/2017 06:00	Footage (ftKB) 278.00	End Depth (ftKB) 9,973.0	Daily Field Est Total (Cost) 33,633.80	Cum Field Est To Date (Cost) 713,441.11
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Activity  
PICKING UP BHA

### 24hr Activity

Com

DRILL ROTATE WITH SURVEY'S F/9,695' T/ 9,798', 103' @ 20.6 FT/HR . WOB 32, RPM 75, MMRPM 132, TOTAL RPM 207,TQ: 10/11 K, SPP 2650, DIFF. 150, GPM 550.

TROUBLE SHOOT WELLBENDER'S MWD, CHANGE TRANSDUCER. NOT PULSING. CONTINUE DRILLING WITH CHERT BIT. NO SURVEY'S.

DRILL ROTATE WITH SURVEY'S F/9,798' T/ 9,883', 85' @ 15.5 FT/HR . WOB 32, RPM 75, MMRPM 132, TOTAL RPM 207,TQ: 10/11 K, SPP 2600, DIFF. 150, GPM 550.

SERVICE RIG, TOP DRIVE, GREASE CROWN.

DRILL ROTATE WITH SURVEY'S F/9,883' T/9973, 90' @ 16.4 FT/HR . WOB 32, RPM 75, MMRPM 132, TOTAL RPM 207,TQ: 10/11 K, SPP 2600, DIFF. 150, GPM 550.

CIRC. BOTTOMS UP, FLOW CHECK AND PUMP SLUG

TOOH F/9973' T/9500'. HOLE TAKING PROPER FILL ON TRIP TANK.

PULL ROT.HEAD ELEMENT, INSTALL TRIP NIPPLE.

TOOH F/9500' T/708'. HOLE TAKING PROPER FILL ON TRIP TANK.

TOOH F/ 708' T/85' RACKING BACK DRILL COLLARS. HOLE TAKING PROPER FILL ON TRIP TANK.

FUNCTION BOP'S. DRAIN MOTOR, BREAK BIT, L/D MWD, UBHO SUB AND BIT. RE-RUN WEATHERFORD MUD LUBE 6 3/4" FIXED MUD MOTOR, 7:8 LOBE, 5.7 STAGE, 0.24 REV/GAL. BTB 6.3', BTS 50'. SCRIBE MOTOR. MAKE UP UBHO SUB, INSTALL MWD, M/U MONEL, SURFACE TEST MWD {GOOD}.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/8/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 7/8/2017 12:00	Report End Date 7/9/2017 06:00	Footage (ftKB)	End Depth (ftKB) 0.0	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
Activity RIGGING DOWN					

### 24hr Activity

Com
PREPARE TOP DRIVE AND L/D SAME HOOK ONTO BRIDDLER LINES AND PREPARE DERRICK TO L/D AND L/D SAME HUNG BLOCK OFF IN DERRICK AND REMOVE WRAPS OFF OF DEAD MAN RESTING CREWS



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/27/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.50	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017	MWD	0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
10,306.00	1.40	299.30	10,302.58	176.18	39.89	176.18	0.29
10,401.00	1.40	300.30	10,397.55	177.34	37.87	177.34	0.03
10,496.00	1.30	301.10	10,492.52	178.48	35.95	178.48	0.11
10,590.00	1.70	284.40	10,586.49	179.38	33.68	179.38	0.63
10,685.00	1.80	288.40	10,681.45	180.20	30.90	180.20	0.17

### Daily Summary

Report Start Date 7/27/2017 06:00	Report End Date 7/28/2017 06:00	Footage (ftKB) 762.00	End Depth (ftKB) 10,735.0	Daily Field Est Total (Cost) 28,628.35	Cum Field Est To Date (Cost) 742,069.46
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Activity  
DRILLING INTERMEDIATE @ 10,735'

### 24hr Activity

Com
MAKE UP SMITH 8 3/4" MDSi713 SER # JM7747. TIH F/ SURFACE T/7,523'. FILLING PIPE EVERY 30 STANDS. HOLE GIVING PROPER DISPLACEMENT.
PULL TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT.
TIH F/7,523' T/9,883'. CAUGHT UP SURVEY'S @ 9,695' & 9,788'. HOLE GIVING PROPER DISPLACEMENT.
WASH AND REAM F/9,883' T/9,973' FOR SAFETY.
DRILL ROTATE WITH SURVEY'S F/9,973' T/10166', 193' @ 55.14 FT/HR . WOB 30, RPM 85, MMRPM 132, TOTAL RPM 217,TQ: 10/11 K, SPP 2850, DIFF. 200, GPM 550.
SERVICE RIG, TOP DRIVE, GREASE CROWN,
DRILL ROTATE WITH SURVEY'S F/10,166' T/10735', 569' @ 47.41 FT/HR . WOB 30, RPM 85, MMRPM 132, TOTAL RPM 217,TQ: 10/15 K, SPP 3000, DIFF. 250, GPM 550.

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 7/28/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
9.50	29

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 7/13/2017	Description MWD	EW Tie In (ft) 0.00	NS Tie In (ft) 0.00	Azimuth Tie In (°) 0.0	Inclination Tie In (°) 0.0	MD Tie In (ftKB) 0.00	TVD Tie In (ftKB) 0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
10,874.00	1.80	307.90	10,870.36	182.62	25.72	182.62	0.52
10,969.00	0.80	289.60	10,965.33	183.76	23.92	183.76	1.13
11,063.00	0.20	284.10	11,059.33	184.02	23.14	184.02	0.64
11,158.00	0.90	326.00	11,154.33	184.68	22.57	184.68	0.80
11,188.00	1.00	315.90	11,184.32	185.07	22.25	185.07	0.65

Daily Summary			
Report Start Date 7/28/2017 06:00	Report End Date 7/29/2017 06:00	Footage (ftKB) 503.00	End Depth (ftKB) 11,238.0
Activity PICKING UP BHA FOR CURVE		Daily Field Est Total (Cost) 35,599.00	Cum Field Est To Date (Cost) 777,668.46

24hr Activity
Com
DRILL ROTATE WITH SURVEY'S F/10,735' T/11,238', 503' @ 41.9 FT/HR . WOB 32, RPM 75, MMRPM 132, TOTAL RPM 207,TQ: 12/13 K, SPP 2950, DIFF. 250/300, GPM 550.
SERVICE RIG AND TOP DRIVE
PERFORM CLEAN UP CYCLE, PUMP HIGH VIS SWEEP'S, WORK FULL STAND, CIRCULATING 2 BOTTOMS UP. SPP 2950', GPM 550, TQ: 14K RPM 85, MMRPM 132. CHECK FLOW, PUMP SLUG.
POOH TO PICK UP CURVE ASSEMBLY F/11,238' T/5,154'. WELL FLOWING DUE TO BALLONING FORMATION.
PUMPED 40 BBL MUD CAP 2# OVER.(WELL STATIC)
PULL ROT. HEAD AND INSTALL TRIP NIPPLE
TOOH F/5154' T/4200'
PUMP SLUG
POOH F/4200' T/708' ( HOLE TAKING PROPER FILL)
LAYDOWN 6 1/2" DRILL COLLARS
PULLED MWD TOOL ,ATTEMPTED TO DRAIN MOTOR ( LOCKED UP) , BROKE OFF BIT ( NO BROKEN OR CHIPPED CUTTERS), LAY DOWN MONEL, UBHO SUB, FLOAT SUB, AND MOTOR



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/29/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.65	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/29/2017	MWD	18.80	185.90	314.4	1.0	11,188.00	11,184.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,299.00	7.10	172.90	11,295.12	181.98	18.79	181.98	10.63
11,330.00	10.30	173.60	11,325.76	177.32	19.34	177.32	10.33
11,362.00	13.30	174.10	11,357.08	170.82	20.03	170.82	9.38
11,394.00	16.20	173.90	11,388.03	162.72	20.89	162.72	9.06
11,425.00	19.40	173.10	11,417.54	153.30	21.96	153.30	10.35

### Daily Summary

Report Start Date 7/29/2017 06:00	Report End Date 7/30/2017 06:00	Footage (ftKB) 242.00	End Depth (ftKB) 11,480.0	Daily Field Est Total (Cost) 286,396.25	Cum Field Est To Date (Cost) 1,064,064.71
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Activity  
DRILLING CURVE @ 11,480'

### 24hr Activity

Com

PICK UP QES 6 1/2" MOTOR, 7:8 LOBE, 5.0 STAGE, 2.38° FIXED 0.28 REV/GAL. BIT TO BEND 4.25', BIT TO SURVEY 55', BIT TO GAMMA 30', MAKE UP UBHO, MONEL, SCRIBE MOTOR, P/U FLEX COLLAR, X-O. INSTALL MWD AND SURFACE TEST SAME. {OK}. MAKE UP ULTERAA 8 3/4" U516M SER.# 27453. TOTAL 96.47'.

PICK UP 21 - JOINTS OF 5" DRILL PIPE TO REPLACE BHA LAID DOWN F/96' T/757'.

SERVICE RIG, TOP DRIVE, GREASE CROWN.

TIH F/757' T/5,301'. FILL PIPE EVERY 30 STANDS. HOLE GIVING PROPER DISPLACEMENT.

PULL TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT.

FILL PIPE, CHECK MWD, CIRCULATE OUT MUD CAP @ 5,301'.

TIH F/5,301' T/11,165'. FILL PIPE EVERY 30 STANDS. HOLE GIVING PROPER DISPLACEMENT.

FILL PIPE, BREAK CIRCULATION, WASH AND REAM F/11,165' T/11,238'. RE-CYCLE PUMP'S.

BUILD CURVE. SLIDE F/11,238' T/11480', 242' @ 18 FT/HR . WOB 8, MMRPM 126, SPP 2000, DIFF. 200, GPM 450, TFO H/S



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/30/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.65	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/29/2017	MWD	18.80	185.90	314.4	1.0	11,188.00	11,184.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,859.00	47.00	202.20	11,773.75	-83.78	2.23	-83.78	11.16
11,867.00	49.70	203.80	11,779.06	-89.29	-0.10	-89.29	36.91
11,930.00	52.20	205.20	11,818.75	-133.80	-20.40	-133.80	4.33
11,962.00	55.00	206.50	11,837.74	-156.97	-31.63	-156.97	9.34
11,993.00	58.00	207.00	11,854.85	-180.05	-43.27	-180.05	9.77

### Daily Summary

Report Start Date 7/30/2017 06:00	Report End Date 7/31/2017 06:00	Footage (ftKB) 589.00	End Depth (ftKB) 12,069.0	Daily Field Est Total (Cost) 25,901.07	Cum Field Est To Date (Cost) 1,097,415.78
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Activity  
DRILLING CURVE @ 12069'

### 24hr Activity

Com
SLIDE F/11,480' T/11,575'. 95', @ 23.8 FT/HR WOB 5/15, SPP 2000, DIFF. 150, GPM 475, MMRPM 133.TF/HS. TROUBLE SHOOT DOWNLINK TOOL, RE-CYCLE PUMPS. SLIDE F/11,575' T/12069'. 494' @ 26 FT/HR WOB 5/15, SPP 2000, DIFF. 150, GPM 475, MMRPM 133.TF/HS.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/31/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.60	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/29/2017	MWD	18.80	185.90	314.4	1.0	11,188.00	11,184.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,120.00	68.90	207.20	11,911.33	-280.54	-96.08	-280.54	7.77
12,151.00	70.70	206.10	11,922.03	-306.54	-109.13	-306.54	6.69
12,183.00	72.00	204.40	11,932.26	-333.96	-122.06	-333.96	6.47
12,215.00	73.90	202.80	11,941.65	-362.00	-134.31	-362.00	7.62
12,246.00	75.60	200.50	11,949.80	-389.79	-145.34	-389.79	9.02

### Daily Summary

Report Start Date 7/31/2017 06:00	Report End Date 8/1/2017 06:00	Footage (ftKB) 232.00	End Depth (ftKB) 12,301.0	Daily Field Est Total (Cost) 73,850.08	Cum Field Est To Date (Cost) 1,171,266.31
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Activity  
BACK REAM OUT OF CURVE @ 12,178'

### 24hr Activity

Com
SLIDE F/12,069' T/12,301'. 232' @ 20.2 FT/HR WOB 5/20, SPP 2000, DIFF. 150, GPM 475, MMRPM 133. { PROJECTION @ BIT 80°}.
SERVICE RIG AND TOP DRIVE.
PERFORM CLEAN UP CYCLE. PUMP 40 BBL OF 50 VIS SWEEP, CIRCULATE BOTTOMS UP.
WIPER TRIP F/12,301' T/11,196' AND BACK T/12,206'.
WASH AND REAM F/12,206' T/12,250'. HOLE PACKING OFF. ATTEMPTING TO CIRCULATE AND WORK PIPE.
ATTEMPTING TO CIRCULATE AND BACK REAM OUT OF CURVE TO RE-GAIN RETURNS F/12,250' T/12,178'. HOLE PACKING OFF.





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/1/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
9.80	29

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 7/29/2017	Description MWD	EW Tie In (ft) 18.80	NS Tie In (ft) 185.90	Azimuth Tie In (°) 314.4	Inclination Tie In (°) 1.0	MD Tie In (ftKB) 11,188.00	TVD Tie In (ftKB) 11,184.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,120.00	68.90	207.20	11,911.33	-280.54	-96.08	-280.54	7.77
12,151.00	70.70	206.10	11,922.03	-306.54	-109.13	-306.54	6.69
12,183.00	72.00	204.40	11,932.26	-333.96	-122.06	-333.96	6.47
12,215.00	73.90	202.80	11,941.65	-362.00	-134.31	-362.00	7.62
12,246.00	75.60	200.50	11,949.80	-389.79	-145.34	-389.79	9.02

Daily Summary				
Report Start Date 8/1/2017 06:00	Report End Date 8/2/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,301.0	Daily Field Est Total (Cost) 36,909.45
Cum Field Est To Date (Cost) 1,208,175.76				

Activity  
TIH @ 1500'

24hr Activity
Com

WASH AND BACK REAM F/12,178' T/12,141' WITH FULL RETURNS. START WASHING AND REAMING BACK IN HOLE F/ 12,141' T/12,175'. TORQUE INCREASED TO 24,250, STALLED OUT, PACKED OFF. ATTEMPT TO REGAIN CIRC. AND FREE STUCK PIPE. PULL UP TRYING TO FREE PIPE HOLDING 18 K TORQUE, PICK UP TO 350 K, STRING WEIGHT 290K, S/O TO 100K. MADE SEVERAL ATTEMPTS. PULLED UP TO 485K S/O TO 100K HOLDING TORQUE IN PIPE, 30 SPM, SPP 1800. BROKE FREE.

WASH AND BACK REAM F/ 12,175' T/12,111'. GPM 475, SPP 2250, TQ: 8860/18500. WASH AND REAM F/12,111' T/12,215'. GPM 475, SPP 2250, TQ: 8860/18500 WOB 2/5K. PUMPED 15 BBLs WEIGHTED 90 VIS SWEEP. CIRCULATE OUT SAME

POOH F/12,215 T/11,200'. HOLE TAKING PROPER FILL ON TRIP TANK.

CHECK WELL FOR FLOW, PUMP SLUG

POOH F/11,200' T/5111' HOLE TAKING PROPER FILL ON TRIP TANK.

REMOVED ROT. HEAD AND INSTALLED TRIP NIPPLE

POOH F/5111' T/DIR. BHA

FUNCTION BOP'S. LAYDOWN DIR. MONEL & MWD TOOL. 8 3/4" PDC BIT AND 23' OF MUD MOTOR WAS LEFT IN HOLE

STRAP & CALIBRATE BIT SUB, X/O SUB, P/U 8 3/4" SMITH FX30 TRI-CONE BIT, SER # RJ1307 MAKE UP SAME. TIH TO CLEAN UP ABOVE FISH LEFT IN HOLE.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/2/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/29/2017	MWD	18.80	185.90	314.4	1.0	11,188.00	11,184.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,120.00	68.90	207.20	11,911.33	-280.54	-96.08	-280.54	7.77
12,151.00	70.70	206.10	11,922.03	-306.54	-109.13	-306.54	6.69
12,183.00	72.00	204.40	11,932.26	-333.96	-122.06	-333.96	6.47
12,215.00	73.90	202.80	11,941.65	-362.00	-134.31	-362.00	7.62
12,246.00	75.60	200.50	11,949.80	-389.79	-145.34	-389.79	9.02

### Daily Summary

Report Start Date 8/2/2017 06:00	Report End Date 8/3/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,301.0	Daily Field Est Total (Cost) 24,802.00	Cum Field Est To Date (Cost) 1,232,977.76
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Activity  
WASHING DOWN TO FISH

### 24hr Activity

Com
TIH F/ 2477' TO 11929' FILLED PIPE EVERY 30 STDs. WASH AND REAM TO TOP OF FISH @ 12281' CIRC AT TOP OF FISH AND PUMPED 45 BBLs. OF HIGH VISC SWEEP AROUND THEN SPOTTED 100 BBLs. OF HIGH VISC GEL MUD ON TOP OF FISH  POOH FOR FISHING TOOLS TO 5213' PULLED ROTATING HEAD AND INSTALL TRIP NIPPLE MIX AND PUMP MUD CAP AT SHOE FINISHED OUT OF HOLE L/D BIT AND BIT SUB P/U STRAPPED AND CALIBRATED FISHING TOOLS AND M/U SAME TIH TO 5138' PULL TRIP NIPPLE AND INSTALLED ROTATING HEAD RUBBER FINISHED IN HOLE AND WASHING F/ 12155' TO 12175'



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/3/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.80	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/29/2017	MWD	18.80	185.90	314.4	1.0	11,188.00	11,184.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,120.00	68.90	207.20	11,911.33	-280.54	-96.08	-280.54	7.77
12,151.00	70.70	206.10	11,922.03	-306.54	-109.13	-306.54	6.69
12,183.00	72.00	204.40	11,932.26	-333.96	-122.06	-333.96	6.47
12,215.00	73.90	202.80	11,941.65	-362.00	-134.31	-362.00	7.62
12,246.00	75.60	200.50	11,949.80	-389.79	-145.34	-389.79	9.02

### Daily Summary

Report Start Date 8/3/2017 06:00	Report End Date 8/4/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,301.0	Daily Field Est Total (Cost) 24,802.00	Cum Field Est To Date (Cost) 1,257,779.76
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Activity  
POOH @ 11500'

### 24hr Activity

Com
ATTEMPTED TO LATCH ONTO FISH WITH OVERSHOT AND GRAPLE @ 12175'
POOH F/12175' T/FISHING TOOLS ( CUT LIP, SPIRAL GRAPLE AND PACKOFF ON OVERSHOT WAS LEFT IN HOLE)
LAYDOWN FISHING OVERSHOT AND PICK UP 2 DRILL COLLARS
CUT AND SLIP DRILLLINE WHILE WAITING ON FISHING TOOLS
SERVICE RIG AND TOPDRIVE
MAKE UP 8 3/4" MILL, JUNK BASKET, BIT & X/O SUB, TWO DRILL COLLARS
TIH TO 11,237'
WASH & RERAM F/11237' T/12,197'
MILL UP FISHING OVERSHOT CUT LIP, GRAPLE AND DRESS OFF FISH @ 12,197'
POOH F/12197' T/11500'

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 8/4/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
9.80	29

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/29/2017	MWD	18.80	185.90	314.4	1.0	11,188.00	11,184.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,120.00	68.90	207.20	11,911.33	-280.54	-96.08	-280.54	7.77
12,151.00	70.70	206.10	11,922.03	-306.54	-109.13	-306.54	6.69
12,183.00	72.00	204.40	11,932.26	-333.96	-122.06	-333.96	6.47
12,215.00	73.90	202.80	11,941.65	-362.00	-134.31	-362.00	7.62
12,246.00	75.60	200.50	11,949.80	-389.79	-145.34	-389.79	9.02

**Daily Summary**

Report Start Date 8/4/2017 06:00	Report End Date 8/5/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,301.0	Daily Field Est Total (Cost) 37,243.00	Cum Field Est To Date (Cost) 1,295,022.76
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Activity  
LAYING DOWN FISHING TOOLS

**24hr Activity**

Com
POOH F/ 10,444' TO BHA L/D MILL AND JUNK BASKET AND CLEAN OUT SAME ( FULL OF SHALE ) L/D 2 6 1/2 DC'S P/U AND M/U DOUBLE BOWL OVERSHOT W/ 6 3/4 GRAPPLE IN BOTTOM AND 6 5/8 GRAPPLE IN TOP AND MOVED JARS UP 2 JTS. ABOVE OVERSHOT TIH T/12150' WASH AND REAM F/ 12,175 TO 12,260' COULD NOT GET DOWN TO TOP OF FISH @ 12281' POOH TO FISHING TOOLS LAYING DOWN FISHING TOOLS



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/5/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.85	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 8/5/2017	Description SIDE TRACK #1	EW Tie In (ft) -86.30	NS Tie In (ft) -263.40	Azimuth Tie In (°) 207.6	Inclination Tie In (°) 67.4	MD Tie In (ftKB) 12,100.00	TVD Tie In (ftKB) 11,905.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 8/5/2017 06:00	Report End Date 8/6/2017 06:00	Footage (ftKB) 8.00	End Depth (ftKB) 12,121.0	Daily Field Est Total (Cost) 24,802.00	Cum Field Est To Date (Cost) 1,319,824.76
Activity TIME DRILLING 5 MIN A INCH @ 12,121'					

### 24hr Activity

Com
SERVICE RIG & TOPDRIVE MAKE UP 2.38° FIXED MOTOR, UBHO SUB, MONEL DC, FLEX , X/O SUB AND MWD TOOL. MADE UP 8 3/4" SMITH FH300 TRI-CONE BIT ( MWD TOOL TESTED GOOD) TIH F/98' T/11,924' WITH DIR. TOOLS TO OPEN HOLE SIDE TRACK REAM F/11924' T/12,113' BUILD THROUGH @ 150° AZM F/12,027' T/12,113' TIME DRLG @ 5 MIN A INCH F/12,113' T/12,121' FOR SIDE TRACK #1



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/9/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 7/9/2017 06:00	Report End Date 7/10/2017 06:00	Footage (ftKB)	End Depth (ftKB) 0.0	Daily Field Est Total (Cost) 74,194.00	Cum Field Est To Date (Cost) 149,764.00
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Activity  
WAITING ON DAYLIGHT

### 24hr Activity

Com
RIGGED DOWN, MOVED AND RIGGED UP MUDTANKS, MUD PUMPS, WATER TANK, DIESEL TANK AND GEN. PACKAGE. MOVED DERRICK, SUB AND DRAW WORKS TO NEW LOCATION. RIG 95% MOVED AND 65% RIGGED UP
WAIT ON DAYLIGHT



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/6/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.85	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 8/5/2017	Description SIDE TRACK #1	EW Tie In (ft) -81.20	NS Tie In (ft) -253.58	Azimuth Tie In (°) 207.9	Inclination Tie In (°) 66.5	MD Tie In (ftKB) 12,088.00	TVD Tie In (ftKB) 11,900.57
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,121.00	68.10	207.70	11,913.30	-280.51	-95.40	292.94	4.88
12,153.00	69.60	206.30	11,924.85	-307.10	-108.94	322.78	6.21

### Daily Summary

Report Start Date 8/6/2017 06:00	Report End Date 8/7/2017 06:00	Footage (ftKB) 79.00	End Depth (ftKB) 12,200.0	Daily Field Est Total (Cost) 25,302.00	Cum Field Est To Date (Cost) 1,357,126.76
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Activity  
DRLG CURVE @ 12,200'

### 24hr Activity

Com
TIME DRILL ON SIDE TRACK # 1 F/12,121' T/12,142' @ 150° AZM DRLG CURVE COMING OFF SIDE TRACK F/12,142' T/12,147' @ 120 RIGHT; F/12,147' T/12,155' @ 100°R; F/12,155' T/12,160' 90°R; F/12,160' T/12,165' @ 50° R; F/12,165' T/12,175' @ 30° R; F/12,175' T/12,200' @ 20° R WOB 30/40K, GPM 450, PP 2000 PSI

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 8/7/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
9.85	29

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/5/2017	SIDE TRACK #1	-81.20	-253.58	207.9	66.5	12,088.00	11,900.57
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,121.00	68.10	207.70	11,913.30	-280.51	-95.40	293.17	4.88
12,153.00	69.60	206.30	11,924.85	-307.10	-108.94	323.01	6.21
12,184.00	71.90	206.60	11,935.07	-333.30	-121.98	352.27	7.48
12,216.00	75.40	207.70	11,944.08	-360.62	-135.99	382.97	11.42

**Daily Summary**

Report Start Date 8/7/2017 06:00	Report End Date 8/8/2017 06:00	Footage (ftKB) 102.00	End Depth (ftKB) 12,302.0	Daily Field Est Total (Cost) 107,267.26	Cum Field Est To Date (Cost) 1,464,394.02
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Activity  
DRLG CURVE @ 12,302'

**24hr Activity**

Com
SLIDE DRLG CURVE F/12,200' T/12,253' @ 30° RIGHT, PP 2000 PSI, GPM 450, WOB 50/85 K, BACK REAMING F/12,253' T/12,243'; TRYING TO GET THOUGH TIGHT SPOT @ 12,243'; PP 2800 PSI, GPM 550, ROT 50 RPM; TORQUE 18000 FT LBS; PUMPED HI/VS SWEEP BACK REAMING F/12,253' T/12,206'; ( GOT THOUGH TIGHT SPOT @ 12,243' ); PP 2800 PSI, GPM 550, ROT 50 RPM;TORQUE 8000 FT LBS ; PUMPED HI/VS SWEEP SLIDE DRLG CURVE F/12,253' T/12,302' @ 30° RIGHT, PP 2800 PSI, GPM 550, WOB 40/70K,





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/8/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.90	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/5/2017	SIDE TRACK #1	-81.20	-253.58	207.9	66.5	12,088.00	11,900.57
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,121.00	68.10	207.70	11,913.30	-280.51	-95.40	293.17	4.88
12,153.00	69.60	206.30	11,924.85	-307.10	-108.94	323.01	6.21
12,184.00	71.90	206.60	11,935.07	-333.30	-121.98	352.27	7.48
12,216.00	75.40	207.70	11,944.08	-360.62	-135.99	382.97	11.42

### Daily Summary

Report Start Date 8/8/2017 06:00	Report End Date 8/9/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,302.0	Daily Field Est Total (Cost) 25,302.00	Cum Field Est To Date (Cost) 1,489,696.02
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Activity  
POOH @ 3500'

### 24hr Activity

Com
LOST 1200 PSI OF PUMP PRESSURE; LOST COMMUNICATION WITH MWD TOOL; CHECKED ALL SURFACE EQUIPMENT POOH F/12302' T/0' LOST 93..84' OF DIRECTIONAL BHA IN HOLE , 8 3/4" INSERT BIT, 6.750 MOTOR, UBHO SUB, MONEL WITH MWD TOOL AND FLEX MONEL SERVICE RIG & TOPDRIVE WAITING ON FISHING TOOLS. MAKE UP 7 7/8" CUT LIP OVERSHOT WITH 6 5/8" SPIRAL GRAPLE , 4 JOINTS OF 5" DRILL PIPE, BUMPER SUB AND FISHING JARS TIH WITH FISHING TOOLS TO 12,143' WASH AND REAM F/12,143' T/12,195' COULD NOT MAKE IT TO FISH. ( 13' FROM TOP OF FISH @ 12,208') PRE-JOB SAFETY MEETING ON TOOH WITH FISHING TOOLS TOOH WITH FISHING TOOLS F/12,195' T/ 3500'



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/9/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.90	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 8/5/2017	Description SIDE TRACK #1	EW Tie In (ft) -81.20	NS Tie In (ft) -253.58	Azimuth Tie In (°) 207.9	Inclination Tie In (°) 66.5	MD Tie In (ftKB) 12,088.00	TVD Tie In (ftKB) 11,900.57
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,121.00	68.10	207.70	11,913.30	-280.51	-95.40	293.17	4.88
12,153.00	69.60	206.30	11,924.85	-307.10	-108.94	323.01	6.21
12,184.00	71.90	206.60	11,935.07	-333.30	-121.98	352.27	7.48

### Daily Summary

Report Start Date 8/9/2017 06:00	Report End Date 8/10/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,208.0	Daily Field Est Total (Cost) 38,760.00	Cum Field Est To Date (Cost) 1,531,706.02
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Activity  
TIH W/ FISHING TOOLS

### 24hr Activity

Com
TOOH F/ 3500 T/ SURFACE BREAK OUT & LAY DOWN WFR FISHING TOOLS SERVICE RIG STRAP & CALIPER BHA M/U 8 3/4" VG-E45C {# 5256922} , 6 3/4" BIT SUB , 6 3/4 X-O TIH W/ BHA T/ 12,195 , FILL PIPE WASH & REAM F/ 12,195 T/ 12208 ( TOP OF FISH) CIRCULATE SWEEPS AND CLEAN HOLE ( HOLE STARTED PACKING OFF AND STICKING STRING ) { SWEEPS WERE BRINGING MASSIVE SHALE ACROSS SHAKERS} POOH F/ 12,208 T/ 3500 REMOVE ROTATING HEAD POOH F/ 3500 T/ SURFACE , BREAK BIT & BIT SUB , L/D SAME MAKE UP 7 7/8" CUT LIP OVERSHOT WITH 6 5/8" SPIRAL GRAPPLE , 4 JOINTS OF 5" DRILL PIPE, BUMPER SUB AND FISHING JARS W/ PACK OFF = 151.93 TIH W/ FISHING TOOLS- F/ 151' T/ 5800'



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/10/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
9.90	29

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/5/2017	Description SIDE TRACK #1	EW Tie In (ft) -81.20	NS Tie In (ft) -253.58	Azimuth Tie In (°) 207.9	Inclination Tie In (°) 66.5	MD Tie In (ftKB) 12,088.00	TVD Tie In (ftKB) 11,900.57
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

Daily Summary					
Report Start Date 8/10/2017 06:00	Report End Date 8/11/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 11,896.0	Daily Field Est Total (Cost) 101,055.18	Cum Field Est To Date (Cost) 1,622,261.20

Activity  
P/U QES DIRECTIONAL BHA

24hr Activity
Com

TIH W/ FISHING TOOLS F/ 5800 T/ 7879 , INSTALL ROTATING HEAD  
SERVICE RIG & TOP DRIVE  
TIH W/ FISHING TOOLS F/ 7879 T/ 11472  
CIRCULATE HI VIS SWEEP TO SHAKERS  
TIH W/ FISHING TOOLS F/ 11472 T/ 11946  
CIRCULATE HI VIS SWEEP TO SHAKERS  
WASH & REAM F/ 11946 T/ 12170  
ATTEMPT TO WASH TO TOP OF FISH @ 12208 , COULD NOT WASH TOOL PAST 12200 { ATTEMPT TO CATCH FISH FAILED}  
TOOH F/ 12200 T 5100  
REMOVE ROTATING HEAD  
TOOH W/ TOOLS F/ 5100 TO SURFACE  
BREAK OUT & L/D FISHING TOOLS  
REMOVE WEAR BUSHING  
HOLD PJSM W/ SCANDRILL , LONE STAR TESTER & XTO REP . R/U TESTER  
CAVITY TEST BOPS : TEST CHOKE MANIFOLD 2" ,4" AND RELATED VALVES 250 LOW 5000 HIGH. TEST PIPE RAM'S, BLIND RAM'S, 250 LOW, 5000 HIGH. TEST ANNULAR 250 LOW, 3500 HIGH. TEST POSITIVE AND CHARTED, (3RD PARTY POWER CHOKE WOULD NOT HOLD FOR TEST)  
{FUNCTIONED POWER CHOKE SEVERAL TIMES ISOLATED TO MANUAL CHOKE TEST BLINDS} ( CONTACTED WEIR F/ REPLACEMENT OF 3 1/16" POWER CHOKE)  
RIG DOWN LONE STAR TESTER  
INSPECT LUBE AND INSTALL WEAR BUSHING  
PICK UP 2.38° ARCHER MUD LUBE 6 3/4" FIXED MUD MOTOR, 7:8 LOBE, 5.0, STAGE, 0.28 REV/GAL. BTB 4.3', BTS 53'.BTG 38'. M/U UBHO, INSTALL MULE SHOE, SCRIBE MOTOR. M/U MONEL, FNMDC INSTALL MWD AND SURFACE TEST SAME. {OK}.( TBHA= 95.17) MAKE UP HUGHES 8 3/4" INSERT VG-38CH BIT ( SER. # 5272703)



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/11/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.90	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 8/5/2017	Description SIDE TRACK #1	EW Tie In (ft) -81.20	NS Tie In (ft) -253.58	Azimuth Tie In (°) 207.9	Inclination Tie In (°) 66.5	MD Tie In (ftKB) 12,088.00	TVD Tie In (ftKB) 11,900.57
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 8/11/2017 06:00	Report End Date 8/12/2017 06:00	Footage (ftKB) 11.00	End Depth (ftKB) 11,907.0	Daily Field Est Total (Cost) 34,826.50	Cum Field Est To Date (Cost) 1,657,087.70
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Activity  
TIME DRILLING SIDETRACK

### 24hr Activity

Com
TIH TO 5110' HELD PJSM ON SLIPPING AND CUTTING DRILL LINE SLIP AND CUT 15 WRAPS OF DRILL LINE SERVICE RIG AND TOP DRIVE TIH TO 11826' WASH AND REAM F/ 11826' TO 11896' AND PREPARE TO BUILD TROUGH BUILD TROUGH F/ 11826' TO 11896' AT 150L TIME DRILL ON SIDE TRACK # 2 F/11,896' T/ 11,906' WOB 13 , GPM 455, PP 1725 GTF 150° L ( 10' @ 5 MIN. PER INCH) TIME DRILL ON SIDE TRACK # 2 F/11,906' T/ 11,907' WOB 13 , GPM 455, PP 1725 GTF 150° L ( 8' @ 4 MIN. PER INCH)



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/12/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.70	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) 89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,931.00	45.60	198.70	11,823.52	45.87	-16.08	-37.31	4.52
11,963.00	49.20	199.60	11,845.18	23.62	-23.81	-13.77	11.44
11,994.00	54.00	204.20	11,864.44	1.11	-32.89	10.50	19.36

### Daily Summary

Report Start Date 8/12/2017 06:00	Report End Date 8/13/2017 06:00	Footage (ftKB) 139.00	End Depth (ftKB) 12,046.0	Daily Field Est Total (Cost) 28,398.00	Cum Field Est To Date (Cost) 1,685,485.70
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Activity  
DRILLING CURVE

### 24hr Activity

Com
SLIDE F/ 11906' TO 11913' ( TIME DRILL @ 4 MIN A INCH @ 150L ) SLIDE F/ 11913' TO 11,920 ( TIME DRILL 3 MIN A INCH @ 150L ) SLIDE F/ 11920' TO 11,925 ( TIME DRILL 2 MIN A INCH @ 150L ) SLIDE / ROTATE BUILDING CURVE COMING OFF SIDE TRACK #2 F/11,950' T/12,046' @ GTF 10R; F/11,925' T/11,930' @ GTF 120°L; F/11,930' T/11,935' GTF 90°L; F/11,935' T/ 11,940' @ GTF 60°L; F/11,940' T/11,945' @ GTF 30°L; F/11,945' T/11,950' @ HS (121' @ 11.5 FPH) WOB 30/40K, GPM 550, OFF BTTM PP 2225 ,, ON BTTM PP 2350 ,DIFF 200/150, OFF BTTM TRQ 10,5K , ON BTTM TRQ 15,5K, RPM 25 , MTR RPM 154, TOTAL RPM 179



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/13/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
9.70	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	89.20	202.2	47.0	11,867.00	11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,931.00	45.60	198.70	11,823.52	45.87	-16.08	-36.65	4.52
11,963.00	49.20	199.60	11,845.18	23.62	-23.81	-13.12	11.44
11,994.00	54.00	204.20	11,864.44	1.11	-32.89	11.16	19.36
12,026.00	59.90	207.70	11,881.88	-22.98	-44.65	37.89	20.59

### Daily Summary

Report Start Date 8/13/2017 06:00	Report End Date 8/14/2017 06:00	Footage (ftKB) 44.00	End Depth (ftKB) 12,090.0	Daily Field Est Total (Cost) 26,912.00	Cum Field Est To Date (Cost) 1,712,397.70
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Activity  
L/D DRILL PIPE @ 8280'

### 24hr Activity

Com
SLIDE F/ 12046' TO 12072' WOB-45, ROP-10, SPM-70-70, PSI-2500, DIFF-75, TF-10R DRILL ROTATE F/ 12,072' T/ 12,079, 7' @ 14 FT/HR . WOB 35, RPM 25, MMRPM 129, TOTAL RPM 154,TQ: 12/15 K, SPP 2550, DIFF. 150, GPM 450.
SLIDE F/ 12079' TO 12090' (18') WOB-45, ROP-9, SPM-70-70, PSI-2500, DIFF-75, TF-10R CIRCULATE & PUMP 30 BBL SWEEP TO SHAKERS , SPOT 100 BBL PILL ON BTM POOH F/ 12,090' T/ 11,157 . PUMP SLUG POOH F/ 11,157 T/ 97. REMOVE ROTATING HEAD REMOVE MWD TOOL , DRAIN MOTOR , BREAK OUT & LAY DOWN MONEL, UBHO SUB, FLOAT SUB, MOTOR & BIT M/U 7-7/8" BIT , BIT SUB & X-O TIH F/ BHA T/ 11,890 ( WORK STRING AND CONFIRM ENTRY OF SIDE TRACK #2F/ 11,890 T/ 11,900 W/ BIT) TIH F/ 11,900 T/ 12,075 , FILL PIPE INSTALL ROTATING HEAD WASH F/ 12,075' T/ 12,090' ( NO ISSUES) CIRCULATE B/U , SPOT HI VIS PILL , FILL TRIP TANK POOH F/ 12,090 T/ 10,698) (15 stands) PUMP SLUG LDDP F/ 10,698 T/ 8280( NO ISSUES)

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 8/14/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
9.70	29

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	89.20	202.2	47.0	11,867.00	11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,931.00	45.60	198.70	11,823.52	45.87	-16.08	-36.65	4.52
11,963.00	49.20	199.60	11,845.18	23.62	-23.81	-13.12	11.44
11,994.00	54.00	204.20	11,864.44	1.11	-32.89	11.16	19.36
12,026.00	59.90	207.70	11,881.88	-22.98	-44.65	37.89	20.59

**Daily Summary**

Report Start Date 8/14/2017 06:00	Report End Date 8/15/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,090.0	Daily Field Est Total (Cost) 25,620.00	Cum Field Est To Date (Cost) 1,737,225.70
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Activity  
RIG REPAIR ON HIGH DRUM 8280'

**24hr Activity**

Com
SERVICE RIG REPAIR BOLTS ON HIGH DRUM CLUTCH , BOLTS WERE SHEARED OFF , REMOVE GUARDS, REPLACE BOLTS ON DRUM , REMOVED SPEAR , BRAKES , OVERRIDING CLUTCH. REPAIRS ARE ESTIMATED TO BE COMPLETE AT 06:00 A.M. 8/15/2017 , INSTALLING GUARDS AND ENCODER ( CIRCULATING WELL THROUGH TOP DRIVE W/ #2 MUD PUMP)



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/15/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
9.70	29

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) 89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,931.00	45.60	198.70	11,823.52	45.87	-16.08	-36.65	4.52
11,963.00	49.20	199.60	11,845.18	23.62	-23.81	-13.12	11.44
11,994.00	54.00	204.20	11,864.44	1.11	-32.89	11.16	19.36
12,026.00	59.90	207.70	11,881.88	-22.98	-44.65	37.89	20.59

Daily Summary			
Report Start Date 8/15/2017 06:00	Report End Date 8/16/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,090.0
Activity Casing - Run in Cement		Daily Field Est Total (Cost) 37,172.46	Cum Field Est To Date (Cost) 1,774,398.16

24hr Activity
Com
SERVICE RIG MOVED DRILL PIPE ONTO PIPE RACK AND PREPARED TO P/U SAME P/U DRILL PIPE OFF OF RACKS TIH OUT OF DERRICK TAGGED BTM. @ 12090' CIRC AND SPOT 100 BBLs. OF GEL MUD IN OPEN HOLE PULLED 10 STDS. AND PUMPED SLUG L/D DRILL PIPE F/ 11,136 T/ 4,000 TIH F/ 4,000 T/ 4,954 LDDP F/ 4,954 T/ 1,012 REMOVE ROTATING HEAD , INSTALL TRIP NIPPLE LDDP F/ 1,012 T/ SURFACE , BREAK BIT , BIT SUB & X-O . L/D SAME P/U RUNNING TOOL AND RETRIEVE WEAR BUSHING { FUNCTION TEST BOP'S & POWER CHOKE}} HOLD PJSM W/ SCAN , BUTCH'S & XTO REP. RIG UP BUTCH'S CASING TOOLS ,CRT & EXTENSION BAILS HOLD PJSM RUN 7" 29#, P-110 , LT&C CASING AS FOLLOWS: 1-7" FLOAT SHOE (1.47) 2- JTS OF 7" 29# , P-110, LT&C CSNG ( 90.60) , 1- 7" F/C (1.30) 20 JTS OF 7" ,29# P-110 , LT&C CSNG. ( 902.74) , 1-7" , 29# , P-110, LT&C MJ (21.30) 246 JTS OF 7",29#,P-110, LT&C CSNG.( 11,075.95 ) RAN TOTAL OF 268 JTS W/ 1 MJ & 61 CENT. ( TOTAL PIPE 12,093.36 ) {SET @ 12090.0 {-3.36} ( TEST F/E = OK)





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/10/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 7/10/2017 06:00	Report End Date 7/11/2017 06:00	Footage (ftKB)	End Depth (ftKB) 0.0	Daily Field Est Total (Cost) 13,904.00	Cum Field Est To Date (Cost) 121,778.00
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Activity  
WAITING ON DAYLIGHT

### 24hr Activity

Com
HELD PRE-JOB SAFETY MEETING WITH RIG HANDS AND BASIC TRUCKING. SET DRAW WORKS , TRACTION MOTOR SKID AND FLOOR PLATES ON SUB. HELD CRITICAL LIFT SAFETY MEETING WITH CRANE OPERATORS, SWAMPERS AND RIG CREW OVER PICKING UP DERRICK. PICKED UP DERRICK WITH CRANES AND PINNED IT TO SUB.SET RACKING BOARD, PINNED DERRICK BOARD TO DERRICK, HOOKED UP VIBERATING HOSES AND SET DOG HOUSE. RIG UP POWER AND AIR TO DRAW WORKS. STARTED STRINGING UP BLOCKS , SNAKE BROKE BETWEEN DRILL LINE AND STRING UP LINE. STRING UP LINE JUMPED SHEIVES AND ALLOWED DRILL LINE TO GET CAUGHT IN DERRICK SHEIVES.SET BULK TANKS, DUCK POND AND DEGASER WHITH CRANE AND RELEASED 3RD CRANE AT 2000 HRS. UNTANGLE STRING UP LINE AND REMOVE DRILL LINE FROM DERRICK SHEIVES. SHUT DOWN FOR NIGHT FALL.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/16/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) 89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,931.00	45.60	198.70	11,823.52	45.87	-16.08	-36.65	4.52
11,963.00	49.20	199.60	11,845.18	23.62	-23.81	-13.12	11.44
11,994.00	54.00	204.20	11,864.44	1.11	-32.89	11.16	19.36
12,026.00	59.90	207.70	11,881.88	-22.98	-44.65	37.89	20.59

### Daily Summary

Report Start Date 8/16/2017 06:00	Report End Date 8/17/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,090.0	Daily Field Est Total (Cost) 63,409.83	Cum Field Est To Date (Cost) 1,837,807.99
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Activity  
NU, ND, Test BOP or Tree

### 24hr Activity

Com
FINISH RUNNING CASING. RUN 7" 29#, P-110, LT&C CASING AS FOLLOWS: 1-7" FLOAT SHOE (1.47) 2- JTS OF 7" 29# , P-110, LT&C CSNG ( 90.60 ) , 1 - 7" F/C (1.30) 20 JTS OF 7" ,29# P-110 , LT&C CSNG. ( 902.74 ) , 1-7" , 29# , P-110, LT&C MJ (21.30) 246 JTS OF 7",29#,P-110, LT&C CSNG.( 11,075.95 ) RAN TOTAL OF 268 JTS W/ 1 MJ & 58 CENT. ( TOTAL PIPE 12,093.36 ) {SET @ 12090.0 {-3.36} { PICKED UP 1 JOINT TO ENSURE WE TAGGED BOTTOM OF SIDETRACK # 2, LAID JOINT BACK DOWN }.
CIRCULATE 1 FULL CIRCULATION WITH CRT WHILE WAITING ON CEMENT HEAD. GPM 323, SPP 354. RIG DOWN CASING CREW TOOLS. HELD PJSM WITH SCAN, HALLIBURTON, XTO REP.
RIG DOWN CRT.
RIG UP CEMENT HEAD AND LINES. LOADED CEMENT PLUG IN HEAD WITNESSED BY XTO REP.
HOLD PJSM W/ HALLIBURTON , SCAN & XTO REP. TEST LINES TO 8000 PSI , PUMP 20 BBL GEL SPACER AHEAD OF 885 SX(441 BBLs) OF LEAD CLASS"H" CEMENT, DENSITY 11.5 ppg, YIELD 2.8 @7.0 BBL/M W/ 180 PSI, FOLLOWED BY 240 SX (53 BBLs) OF TAIL CLASS"H" CEMENT, DENSITY 14.4 ppg, YIELD 1.247 @ 7 BBL/M W/180 PSI. RELEASE PLUG, DISPLACE WITH 445 BBLs OF 8.3 ppg FW @ 6.5 BBL/M @ 1500 PSI. BUMP PLUG 500 PSI OVER @ 3 BBL/M. FINAL BUMP 2000 PSI. RELEASE PSI. BLEED BACK 3 BBLs TO TANKS.FLOATS HELD. CIP @ 11:30 PM 8/16/2017. CALCULATED CEMENT TOP 2000' FULL RETURNS DURING JOB { CIRCULATED 0 SX/BBLs CEMENT TO SURFACE }.
RIG DOWN HALLIBURTON CEMENTERS
PJSM W/ LONE STAR , SCAN , & XTO REP . RIG UP WENCHES , NIPPLE DOWN BOP'S
SET 165K IN CASING SLIPS , MAKE ROUGH CUT ON 7" CASING , L/D CUT OFF
NIPPLE DOWN ROTATING HEAD BELL NIPPLE DUE TO SPACING BETWEEN FLO LINE & ROTARY BEAM, DROP 57" 13-5/8" X 10M X 11" X 5M SPACER SPOOL



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/17/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
8.40	28

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) 89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,931.00	45.60	198.70	11,823.52	45.87	-16.08	-36.65	4.52
11,963.00	49.20	199.60	11,845.18	23.62	-23.81	-13.12	11.44
11,994.00	54.00	204.20	11,864.44	1.11	-32.89	11.16	19.36
12,026.00	59.90	207.70	11,881.88	-22.98	-44.65	37.89	20.59

Daily Summary			
Report Start Date 8/17/2017 06:00	Report End Date 8/18/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,090.0
Activity WAIT ON 4 3/4" NMDC'S		Daily Field Est Total (Cost) 35,955.90	Cum Field Est To Date (Cost) 1,945,665.89

24hr Activity
Com
MAKE FINAL CUT ON 7" CASING AND DRESS OFF SAME. { CLEANING MUD TANKS}. INSTALL 11" 5M X 7 1/16" 10M TUBING HEAD , TORQUE BOLTS. TEST @ 5000 PSI {OK}. NIPPLE UP 7 1/16" 10M X 13 5/8" 10M DSA. NIPPLE UP SCAN 24" SPACER SPOOL, 13 5/8" 10M BOP'S, ROTATING HEAD, TORQUE SAME. RIG DOWN STACK LIFT'S, LOAD OUT SAME. HELD PJSM WITH SCAN, LONE STAR TESTER, XTO REP. RIG UP TESTER, INSTALL TEST PLUG, AND FILL STACK WITH H2O. { FILL MUD TANKS WITH 12.7 PPG OBM }. TEST BOTH SETS OF PIPE RAMS, BLIND RAMS, KILL LINE, HCR HYRAULIC AND 4"MANUAL, CHOKE MANIFOLD AND RELATED VALVES 250 PSI LOW 10,000 PSI HIGH. TEST HYDRIL, STAND PIPE, 4" VALVES ON MUD PUMPS 250 LOW 3500 HIGH. TEST FLOOR VALVES 250 LOW 10,000 HIGH. {ALL TEST GOOD }. PULL TEST PLUG, RIG DOWN TESTER. TEST CASING @ 1500 PSI FOR 30 MINUTES WITH LONE STAR TESTER. {OK}. SERVICE RIG & TOP DRIVE LINE UP CHOKE VALVES TO CORRECT POSITION, CENTER STACK & SECURE STACK CHANGE OUT DIE BLOCKS , HYDRAULIC IBOP AND BURN IN SUB TO XT-39 LAY OUT & STRAP 165 JTS OF 4" XT-39 DP INSTALL WEAR BUSHING PICK UP QES 4 3/4" MOTOR, 7:8 LOBE, 3.8 STAGE, 1.75° FIXED 0.56 REV/GAL. BIT TO BEND 4.45', BIT TO SURVEY 50', BIT TO GAMMA 36', MAKE UP UBHO, MONELS, SCRIBE MOTOR. INSTALL MWD AND SURFACE TEST SAME {OK}. MAKE UP SECURITY MM53D SERIAL #(12856184). { WHILE GOINGTHROUGH BOP DRILLER STACKED OUT ON WEAR BUSHING BENDING TOP MONEL , L/D MONEL DISCOVERED NON MAG SHAVINGS & TRASH ON TOP OF MWD } PULL MWD , LAY DOWN NMDC UBHO MTR & BIT ( DISCOVERED NMDC SHAVINGS ON TOP OF MWD ) RETRIEVE WEAR BUSHING , INSPECT AND INSTALL WEAR BUSHING WAIT ON MONEL DRILL COLLARS



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/18/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.15	53

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	89.20	202.2	47.0	11,867.00	11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
11,931.00	45.60	198.70	11,823.52	45.87	-16.08	-36.65	4.52
11,963.00	49.20	199.60	11,845.18	23.62	-23.81	-13.12	11.44
11,994.00	54.00	204.20	11,864.44	1.11	-32.89	11.16	19.36
12,026.00	59.90	207.70	11,881.88	-22.98	-44.65	37.89	20.59

### Daily Summary

Report Start Date 8/18/2017 06:00	Report End Date 8/19/2017 06:00	Footage (ftKB) 10.00	End Depth (ftKB) 12,100.0	Daily Field Est Total (Cost) 45,196.60	Cum Field Est To Date (Cost) 1,990,990.59
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Activity  
DRILL SHOE TRACK & 10' NEW FORMATION

### 24hr Activity

Com
SERVICE RIG, TOP DRIVE WHILE WAITING ON 4 3/4" NMDC'S.
WAITING ON 4 3/4" NMDC'S. ARRIVED ON LOCATION @ 07:45. UNLOAD, STRAP AND CALIPER SAME.
PICK UP QES 4 3/4" MOTOR, 7-8 LOBE, 3.8 STAGE, 1.75° FIXED 0.56 REV/GAL. BIT TO BEND 4.75', BIT TO SURVEY 50', BIT TO GAMMA 36', MAKE UP UBHO, MONELS, SCRIBE MOTOR. INSTALL MWD AND SURFACE TEST SAME {OK}. MAKE UP SECURITY MM53D SERIAL #(12856183). TOTAL BHA 87.54'.
HELD PJSM WITH SCAN, XTO REP. ON PICKING UP 4" XT-39 DRILL PIPE OFF RACK'S.
PICK UP 165 JOINT'S OF 4" XT-39 DRILL PIPE OFF RACK'S F/87.54' T/5,267.95'. FILLING PIPE EVERY 30 STAND'S.
LOAD PIPE RACK'S WITH 165 JOINT'S OF 4" XT-39 DRILL PIPE AND STRAP SAME.
PICK UP 165 JOINT'S OF 4" XT-39 DRILL PIPE OFF RACK'S F/5,267.95' T/ 10,450'. FILLING PIPE EVERY 30 STAND'S.
LOAD PIPE RACK'S WITH 50 JOINT'S OF 4" XT-39 DRILL PIPE AND STRAP SAME.
PICK UP 48 JOINT'S OF 4" XT-39 DRILL PIPE OFF RACK'S F/10,450.24' T/ 11,982' FILLING PIPE EVERY 30 STAND'S. ( TAG CEMENT @ 11,982' )
REMOVE TRIP NIPPLE , INSTALL ROTATING HEAD
DRILL CMT , F/C & SHOE TRACK F/ 11,982' T/ 12,075', GPM- 200, PSI- OFF BTTM 1025-ON BTTM 1250, DIFF 250, RPM-30-MTR RPM 104, TQ- ON BTTM 3900/ OFF BTTM 1500. (TAGGED FLOAT COLLAR @ 11,997')
DISPLACE WELL W/ 12.1ppg OBM
FINISH DRILLING SHOE TRACK F/ 12,075' T/ 12,090', PLUS 10' NEW FORMATION F/ 12,090 T/ 12,100 ( 10' @ 20 FPH) WOB-15 GPM- 200, PSI- OFF BTTM 2525-ON BTTM 2750, DIFF 200, RPM-45-MTR RPM 104, TQ- ON BTTM 5000/ OFF BTTM 2000.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/19/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.15	66

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	89.20	202.2	47.0	11,867.00	11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,094.00	68.90	210.50	11,911.24	-76.47	-74.48	100.72	13.74
12,126.00	72.10	210.30	11,921.92	-102.49	-89.75	130.74	10.02
12,157.00	74.10	207.30	11,930.93	-128.48	-104.03	160.33	11.28
12,188.00	76.50	198.40	11,938.81	-156.08	-115.65	190.26	28.82
12,220.00	79.20	204.90	11,945.56	-185.14	-127.19	221.47	21.57

### Daily Summary

Report Start Date 8/19/2017 06:00	Report End Date 8/20/2017 06:00	Footage (ftKB) 200.00	End Depth (ftKB) 12,300.0	Daily Field Est Total (Cost) 26,711.00	Cum Field Est To Date (Cost) 2,017,701.59
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Activity  
BUILD CURVE SLIDE DRILL @ 12,300'

### 24hr Activity

Com
CIRCULATE BOTTOMS UP TO PERFORM FIT. CLOSE TOP PIPE RAM'S, OPEN HCR, PUMP THRU CHOKE TO ENSURE FLOW. CLOSE CHOKE AND PERFORM FIT TO 14 PPG EMW WITH 11.95 PPG OBM. TEST TO 1,268 PSI. {GOOD TEST }. BLEED OFF PRESSURE, OPEN RAM'S, CLOSE HCR, LINE CHOKE UP FOR HARD SHUT-IN. DOWN LOAD MWD TO CORRECT MODE. BUILDING CURVE. SLIDE F/12,100' T/12,144'. 44' @ 9.8 FT/HR. WOB 10, SPP 2850, SPM 85, GPM 247, DIFF-130, TF 60L. SERVICE RIG, TOP DRIVE. BUILDING CURVE. SLIDE F/12,144' T/12,176'. 32' @ 12.8 FT/HR. WOB 20, SPP 3300, SPM 85, GPM 247, DIFF-150, TF 30L. TROUBLE SHOOT MWD MONITOR. LOST COMMUNICATION BETWEEN MONITOR ON RIG FLOOR AND MWD EQUIPMENT IN TRAILER HOUSE. BUILDING CURVE. SLIDE F/12,176' T/12,300'. 124' @ 9.9 FT/HR. WOB 4, SPP 2900, SPM 75, GPM 220, DIFF-150, TF 28L.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/20/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.50	70

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	89.20	202.2	47.0	11,867.00	11,779.30
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,376.00	84.00	188.40	11,967.84	-331.45	-174.67	368.77	14.47
12,408.00	84.70	183.80	11,970.99	-363.10	-178.06	399.96	14.47
12,439.00	85.30	179.20	11,973.69	-393.96	-178.86	429.62	14.91
12,471.00	86.30	175.00	11,976.04	-425.83	-177.25	459.50	13.46
12,502.00	86.90	169.90	11,977.87	-456.50	-173.18	487.50	16.54

### Daily Summary

Report Start Date 8/20/2017 06:00	Report End Date 8/21/2017 06:00	Footage (ftKB) 262.00	End Depth (ftKB) 12,562.0	Daily Field Est Total (Cost) 40,157.00	Cum Field Est To Date (Cost) 2,056,245.59
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Activity  
BUILD CURVE SLIDE DRILL @ 12,562'

### 24hr Activity

Com
BUILDING CURVE. SLIDE F/12,300' T/12,426'. 126' @ 12 FT/HR. WOB 4, SPP 2900, SPM 75, GPM 218, MMRPM 113, DIFF-150, TF 80L. SERVICE RIG AND TOP DRIVE BUILDING CURVE. SLIDE F/12,426' T/12,451'. 25' @ 25 FT/HR. WOB 7, SPP 3120, SPM 80, GPM 232, MMRPM 121, DIFF-150, TF 80L. SLIDE F/12,441' T/12,451'. 10' @ 10 FT/HR. WOB 7, SPP 3100, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90L. TROUBLE SHOOT AND REPLACE LUBE OIL PUMP & FUSE ON HYDRAULIC IBOP CONJUNCTION BOX ON CANRIG TOP DRIVE BUILDING CURVE. SLIDE F/12,451' T/12,562'. 111' @ 13.8 FT/HR. WOB 4, SPP 3100, SPM 80, GPM 230, MMRPM 119, DIFF-150, TF 90L.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/21/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.50	55

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.13	NS Tie In (ft) -89.18	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
13,320.00	90.30	159.70	11,981.34	-1,403.75	103.17	1,178.19	2.95
13,414.00	91.00	161.60	11,980.27	-1,492.43	134.31	1,248.53	2.15
13,508.00	90.70	162.30	11,978.88	-1,581.80	163.43	1,320.27	0.81
13,602.00	91.60	163.00	11,976.99	-1,671.50	191.46	1,392.73	1.21
13,696.00	90.60	162.00	11,975.18	-1,761.13	219.72	1,465.04	1.50

### Daily Summary

Report Start Date 8/21/2017 06:00	Report End Date 8/22/2017 06:00	Footage (ftKB) 1,233.00	End Depth (ftKB) 13,795.0	Daily Field Est Total (Cost) 86,335.38	Cum Field Est To Date (Cost) 2,142,488.97
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Activity  
DRILLING LATERAL @ 13, 795'

### 24hr Activity

Com  
BUILD CURVE. ROTATE F/12,562' T/12,614'. WOB 10, RPM 60, TQ: 4980 K, SPP 3460, DIFF. 390, GPM 232, MMRPM 121. {LANDED CURVE @ 12,614'}.

DRILL LATERAL. ROTATE F/12,614' T/12,814', 200' @ 50 FT/HR . WOB 10, RPM 60, TQ: 4980 K, SPP 3460, DIFF. 390, GPM 232, MMRPM 121.

SLIDE F/12,814' T/12,824'. 10' @ 10 FT/HR. WOB 5, SPP 3100, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 180.

DRILL ROTATE F/12,824' T/13087', 263' @ 75.14 FT/HR . WOB 12, RPM 68, TQ: 4460 K, SPP 3450, DIFF. 380, GPM 232, MMRPM 121.

SERVICE RIG AND TOP DRIVE.

DRILL ROTATE F/13,087' T/13097', 10' @ 20 FT/HR . WOB 12, RPM 68, TQ: 4460 K, SPP 3450, DIFF. 380, GPM 232, MMRPM 121.

SLIDE F/13,097' T/13,107'. 10' @ 6.67 FT/HR. WOB 5, SPP 3100, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 180.

DRILL ROTATE F/13,107' T/13276', 169' @ 67.6 FT/HR . WOB 12, RPM 68, TQ: 4460 K, SPP 3450, DIFF. 380, GPM 232, MMRPM 121.

SLIDE F/13,276' T/13,291'. 15' @ 15 FT/HR. WOB 5, SPP 3100, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90R.

DRILL ROTATE F/13,291' T/13,375', 84' @ 84 FT/HR . WOB 12, RPM 68, TQ: 4460 K, SPP 3450, DIFF. 380, GPM 232, MMRPM 121.

SLIDE F/13,375' T/13,390'. 15' @ 15 FT/HR. WOB 5, SPP 3175, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90R.

DRILL ROTATE F/13,390' T/13,464', 74' @ 74 FT/HR . WOB 12, RPM 68, TQ: 4460 K, SPP 3450, DIFF. 380, GPM 232, MMRPM 121.

SLIDE F/13,464' T/13,474'. 10' @ 20 FT/HR. WOB 5, SPP 3100, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 130R.

DRILL ROTATE F/13,474' T/13,652', 238' @ 95.2 FT/HR . WOB 12, RPM 68, TQ: 4460 K, SPP 3450, DIFF. 380, GPM 232, MMRPM 121.

SLIDE F/13,652' T/13,664'. 12' @ 24 FT/HR. WOB 5, SPP 3180, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 180.

DRILL ROTATE F/13,664' T/13,795', 131' @ 65.5 FT/HR . WOB 12, RPM 68, TQ: 4460 K, SPP 3450, DIFF. 380, GPM 232, MMRPM 121.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/22/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.50	65

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) -89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
14,371.00	89.80	160.10	11,987.51	-2,398.79	440.11	1,972.16	18.37
14,448.00	90.80	166.70	11,987.11	-2,472.54	462.09	2,032.14	8.67
14,542.00	91.40	166.70	11,985.31	-2,564.00	483.71	2,108.65	0.64
14,636.00	89.70	161.50	11,984.40	-2,654.37	509.46	2,182.59	5.82
14,731.00	89.80	160.10	11,984.82	-2,744.08	540.70	2,253.85	1.48

### Daily Summary

Report Start Date 8/22/2017 06:00	Report End Date 8/23/2017 06:00	Footage (ftKB) 1,001.00	End Depth (ftKB) 14,796.0	Daily Field Est Total (Cost) 42,584.00	Cum Field Est To Date (Cost) 2,185,072.97
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Activity  
DRILL LATERAL @ 14,796

### 24hr Activity

Com
DRILL ROTATE F/13,795' T/13,850', 55' @ 55 FT/HR . WOB 15, RPM 70, TQ: 5500 K, SPP 3750, DIFF. 400, GPM 232, MMRPM 121.
SLIDE F/13,850' T/13,865'. 15' @ 6 FT/HR. WOB 15, SPP 3350, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90R.
DRILL ROTATE F/13,865' T/13,944', 79' @ 52.7 FT/HR . WOB 15, RPM 70, TQ: 5500 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121.
SLIDE F/13,944' T/13,964'. 20' @ 13.3 FT/HR. WOB 15, SPP 3350, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90R.
DRILL ROTATE F/13,964' T/14,137', 173' @ 57.7 FT/HR . WOB 15, RPM 65, TQ: 5500 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121.
SLIDE F/14,137' T/14,147'. 10' @ 10 FT/HR. WOB 15, SPP 3350, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 160R.
DRILL ROTATE F/14,137' T/14,216', 69' @ 138 FT/HR . WOB 15, RPM 65, TQ: 5500 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121.
SERVICE RIG AND TOP DRIVE
DRILL ROTATE F/14,216' T/14,231', 15' @ 30 FT/HR . WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121.
SLIDE F/14,231' T/14,249'. 18' @ 36 FT/HR. WOB 15, SPP 3350, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 80R.
DRILL ROTATE F/14,249' T/14,335', 86' @ 57.3 FT/HR . WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121.
SLIDE F/14,325' T/14,340'. 15' @ 30 FT/HR. WOB 15, SPP 3350, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 60R.
DRILL ROTATE F/14,340' T/14,360', 20' @ 40 FT/HR . WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121.
SLIDE F/14,360' T/14,372'. 12' @ 24 FT/HR. WOB 15, SPP 3350, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90R.
DRILL ROTATE F/14,372' T/14,435', 63' @ 42 FT/HR . WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121.
SLIDE F/14,435' T/14,450'. 15' @ 30 FT/HR. WOB 15, SPP 3450, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF HS.
DRILL ROTATE F/14,450' T/14,607', 157' @ 62.8 FT/HR . WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121.
SLIDE F/14,607' T/14,620'. 13' @ 20' FT/HR. WOB 15, SPP 3450, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 120L.
DRILL ROTATE F/14,620' T/14,796', 176' @ 50.2 FT/HR . WOB 15, RPM 65, TQ: 5000 K, SPP 3725, DIFF. 350, GPM 232, MMRPM 121.





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/23/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
12.45	72

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) -89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
15,201.00	88.80	162.30	11,990.23	-3,186.41	699.25	2,603.48	2.43
15,296.00	90.20	163.70	11,991.06	-3,277.25	727.02	2,677.09	2.08
15,390.00	90.70	162.50	11,990.32	-3,367.19	754.35	2,750.04	1.38
15,484.00	90.20	162.20	11,989.58	-3,456.76	782.85	2,822.20	0.62
15,578.00	89.40	161.50	11,989.91	-3,546.08	812.13	2,893.84	1.13

Daily Summary			
Report Start Date 8/23/2017 06:00	Report End Date 8/24/2017 06:00	Footage (ftKB) 864.00	End Depth (ftKB) 15,660.0
Activity DRILL LATERAL @ 15,660'.		Daily Field Est Total (Cost) 44,641.68	Cum Field Est To Date (Cost) 2,229,714.65

24hr Activity
Com
SLIDE F/14,796' T/14,808'. 12' @ 12' FT/HR. WOB 10, SPP 3500, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90R. DRILL ROTATE F/14,808' T/14,890'. 82' @ 82 FT/HR. WOB 18, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121. SLIDE F/14,890' T/14,905'. 15' @ 4.3' FT/HR. WOB 10, SPP 3500, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90R. DRILL ROTATE F/14,905' T/14,937'. 32' @ 32 FT/HR. WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121 SLIDE F/14,937' T/14,947'. 10' @ 10' FT/HR. WOB 18, SPP 3500, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 120R. DRILL ROTATE F/14,947' T/14,969'. 22' @ 44 FT/HR. WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121 SERVICE RIG AND TOP DRIVE. DRILL ROTATE F/14,969' T/15,000'. 31' @ 62 FT/HR. WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121 SLIDE F/15,000' T/15,018'. 18' @ 12' FT/HR. WOB 14, SPP 3500, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 120R. DRILL ROTATE F/15,018' T/15,078'. 60' @ 40 FT/HR. WOB 15, RPM 65, TQ: 5000 K, SPP 3650, DIFF. 350, GPM 232, MMRPM 121 SLIDE F/15,078' T/15,084'. 6' @ 6' FT/HR. WOB 16K, SPP 3650, SPM 80, GPM 232, MMRPM 121, DIFF-350, TF 100R. DRILL ROTATE F/15,084' T/15,125'. 41' @ 41 FT/HR. WOB 15, RPM 65, TQ: 5000 K, SPP 3750, DIFF. 400, GPM 232, MMRPM 121. SLIDE F/15,125' T/15,140'. 15' @ 15' FT/HR. WOB 16K, SPP 3550, SPM 80, GPM 232, MMRPM 121, DIFF-200, TF 45R. DRILL ROTATE F/15,140' T/15,188'. 48' @ 96 FT/HR. WOB 14K, RPM 65, TQ: 6000 K, SPP 3750, DIFF. 350, GPM 232, MMRPM 121. SLIDE F/15,188' T/15,200'. 12' @ 12' FT/HR. WOB 16K, SPP 3500, SPM 80, GPM 232, MMRPM 121, DIFF-200, TF 40R. DRILL ROTATE F/15,200' T/15,283'. 83' @ 83 FT/HR. WOB 15, RPM 75, TQ: 5000 K, SPP 3750, DIFF. 350, GPM 232, MMRPM 121. SLIDE F/15,283' T/15,293'. 10' @ 20' FT/HR. WOB 30K, SPP 3650, SPM 80, GPM 232, MMRPM 121, DIFF-350, TF 30R. DRILL ROTATE F/15,293' T/15,570'. 277' @ 69 FT/HR. WOB 15, RPM 70, TQ: 5000 K, SPP 3750, DIFF. 350, GPM 232, MMRPM 121. SLIDE F/15,570' T/15,580'. 10' @ 20' FT/HR. WOB 15K, SPP 3650, SPM 80, GPM 232, MMRPM 121, DIFF-350, TF 90R. DRILL ROTATE F/15,580' T/15,660'. 80' @ 80 FT/HR. WOB 15, RPM 70, TQ: 5000 K, SPP 3750, DIFF. 350, GPM 232, MMRPM 121.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/24/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.50	65

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
16,427.00	90.90	163.40	11,962.32	-4,356.41	1,062.60	3,549.44	3.20
16,521.00	89.80	160.80	11,961.75	-4,445.85	1,091.49	3,621.33	3.00
16,615.00	91.10	162.00	11,961.01	-4,534.93	1,121.47	3,692.49	1.88
16,709.00	91.60	162.30	11,958.79	-4,624.38	1,150.27	3,764.42	0.62
16,803.00	91.60	162.20	11,956.17	-4,713.87	1,178.92	3,836.45	0.11

### Daily Summary

Report Start Date 8/24/2017 06:00	Report End Date 8/25/2017 06:00	Footage (ftKB) 1,225.00	End Depth (ftKB) 16,885.0	Daily Field Est Total (Cost) 47,699.88	Cum Field Est To Date (Cost) 2,277,414.53
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#### Activity

DRILL LATERAL @ 16,885'.

### 24hr Activity

#### Com

DRILL ROTATE F/15,660' T/15,926', 266' @ 66.5 FT/HR . WOB 15, RPM 70, TQ: 5500-62000 K, SPP 3950, DIFF. 400, GPM 232, MMRPM 121.  
SLIDE F/15,926' T/15,946'. 20' @ 6.67' FT/HR. WOB 20K, SPP 3550, SPM 80, GPM 232, MMRPM 121, DIFF-50, TF 130R.  
DRILL ROTATE F/15,946' T/16,020', 74' @ 49.3 FT/HR . WOB 22, RPM 75, TQ: 5500-62000 K, SPP 3950, DIFF. 400, GPM 232, MMRPM 121.  
SLIDE F/16,020' T/16,045'. 25' @ 25' FT/HR. WOB 20K, SPP 3650, SPM 80, GPM 232, MMRPM 121, DIFF-100, TF 90R.  
SERVICE RIG AND TOP DRIVE.  
DRILL ROTATE F/16,045' T/16,319', 274' @ 68.5 FT/HR . WOB 22, RPM 60-75, TQ: 6,000-7,200 K, SPP 3850, DIFF. 400, GPM 232, MMRPM 121.  
SLIDE F/16,319' T/16,330'. 11' @ 11' FT/HR. WOB 15K, SPP 3550, SPM 80, GPM 232, MMRPM 121, DIFF-200, TF 160L.  
DRILL ROTATE F/16,330' T/16,603', 273' @ 78 FT/HR . WOB 20, RPM 65, TQ: 7 K, SPP 3850, DIFF. 450, GPM 232, MMRPM 121.  
SLIDE F/16,603' T/16,618'. 15' @ 15 FT/HR. WOB 25K, SPP 3600, SPM 80, GPM 232, MMRPM 121, DIFF-250, TF 70R.  
DRILL ROTATE F/16,618' T/16,885', 267' @ 59.4 FT/HR . WOB 20, RPM 65, TQ: 7 K, SPP 3900, DIFF. 450, GPM 232, MMRPM 121.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/25/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.50	61

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

### Daily Summary

Report Start Date 8/25/2017 06:00	Report End Date 8/26/2017 06:00	Footage (ftKB) 656.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 35,274.38	Cum Field Est To Date (Cost) 2,312,688.91
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Activity  
TOOH @ 12,500'.

### 24hr Activity

Com
DRILL ROTATE F/16,885' T/17,151', 266' @ 76 FT/HR . WOB 20, RPM 65, TQ: 7 K, SPP 4000, DIFF. 450, GPM 232, MMRPM 121.
SLIDE F/17,151' T/17,166'. 15' @ 10 FT/HR. WOB 25K, SPP 3600, SPM 80, GPM 232, MMRPM 121, DIFF-145, TF 180.
DRILL ROTATE F/17,166' T/17,419', 253' @ 72.3 FT/HR . WOB 20, RPM 65, TQ: 7 K, SPP 4000, DIFF. 450, GPM 232, MMRPM 121.
SERVICE RIG AND TOP DRIVE.
DRILL ROTATE F/17,419' T/17,528', 109' @ 72.7 FT/HR . WOB 20, RPM 65, TQ: 7 K, SPP 4000, DIFF. 450, GPM 232, MMRPM 121.
SLIDE F/17,528' T/17,535'. 7' @ 3.5 FT/HR. WOB 25K, SPP 3560, SPM 80, GPM 232, MMRPM 121, DIFF- 40, TF 90R. ATTEMPTING TO SLIDE STACKING WEIGHT.NOT GETTING WEIGHT TO BIT.
PERFORM CLEAN UP CYCLE, CIRCULATE TO CLEAN HOLE. SPP 3985, GPM 250, RPM 95, TQ: 4750.
SLIDE F/17,535' T/17,541'. 6' @ 4.0 FT/HR. WOB 25K, SPP 3560, SPM 85, GPM 247, MMRPM 129, DIFF- 40, TF 90R. ATTEMPTING TO SLIDE STACKING WEIGHT.NOT GETTING WEIGHT TO BIT.
CHK FLOW (STATIC). PREPARE TO TOOH, DUE TO NOT ABLE TO SLIDE.
TOOH F/ 17,541' T/ 17,445'. TIGHT HOLE.
WASH AND BACKREAM F/17,445' T/ 16,745', 200-240 GPM, 60-75 RPM, 3-10K TQ, DIFF 0-550 PSI.
TOOH F/16,745' T/ 12,500'. HOLE TAKING PROPER FILL.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/26/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
12.50	57

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) -89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

Daily Summary			
Report Start Date 8/26/2017 06:00	Report End Date 8/27/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0
Activity WASH AND REAM @ 15,460'		Daily Field Est Total (Cost) 39,568.00	Cum Field Est To Date (Cost) 2,352,256.91

24hr Activity
Com
TOOH F/12,500' T/12,025'. HOLE TAKING PROPER FILL ON TRIP TANK. PULL ROTATING HEAD ELEMENT, INSTALL TRIP NIPPLE. TOOH F/12,025' T/SURFACE.HOLE TAKING PROPER FILL ON TRIP TANK. FUNCTION BOP'S. MOTOR DRAINED THRU BIT WHEN PULLED THRU ROTARY. BREAK BIT, PULL MWD, LAY DOWN MUD MOTOR. PICK UP QES 4 3/4" MOTOR, 7:8 LOBE, 3.8 STAGE, 1.83° FIXED 0.52 REV/GAL. BIT TO BEND 4.25', BIT TO SURVEY 50', BIT TO GAMMA 36', SCRIBE MOTOR, INSTALL NEW MULE SHOE IN UBHO INSTALL MWD AND SURFACE TEST SAME {OK}. MAKE UP ULTERRA U513M SER # 31896. TOTAL BHA 87.29'. CLEAN OBM OFF RIG FLOOR FOR SAFETY. TIH F/87.29' T/2,975'. PICK UP AGITATOR {24.08'} TOTAL 2,999.46'. TEST PRESSURE BEFORE PICK UP # 2 PUMP @ 80 SPM, 1,550 SPP, 232 GPM. AFTER PICK UP @ 80 SPM, 2,000 SPP, 232 GPM. HOLE GIVING PROPER DISPLACEMENT. TIH F/2,999' T/12,025'. HOLE GIVING PROPER DISPLACEMENT. FILL PIPE EVERY 30 STANDS. REMOVE TRIP NIPPLE AND INSTALL ROTATING RUBBER. S/C DRILL LINE 125'. SERVICE RIG. REPAIR HYDRAULIC LINES AND FITTINGS ON TOP DRIVE IBOP. TIH F/12,025' T/12,180'. TEST MWD, HIGH SIDE MUD MOTOR. TIH F/12,180' T/15,077'. TIGHT HOLE. FILL EVERY 30 STDS. HOLE GIVING CORRECT DISPLACEMENT. DUE TO TIGHT HOLE W/R 15,077' T/15,460. 200 GPM, 50 RPM, 3-6K TQ.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/27/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.50	60

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

### Daily Summary

Report Start Date 8/27/2017 06:00	Report End Date 8/28/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 32,092.00	Cum Field Est To Date (Cost) 2,384,348.91
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Activity  
WASH AND REAM @ 17,082

### 24hr Activity

Com
DUE TO TIGHT HOLE W/R 15,460' T/17,003. 200 GPM, 50 RPM, 3-6K TQ. { 1543' @ 134 FT/HR }. SERVICE RIG AND TOP DRIVE. LAY DOWN BAD JOINT DRILL PIPE MUSHROOMED ON BOX. W/R 17,003' T/17,082. 150-250 GPM, 50-60 RPM, 3-8K TQ. HOLE TRYING TO PACKOFF. INCREASED MUD WEIGHT F/12.5 T/12.7 PPG.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/28/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.80	59

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

### Daily Summary

Report Start Date 8/28/2017 06:00	Report End Date 8/29/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 59,650.56	Cum Field Est To Date (Cost) 2,443,999.47
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Activity  
WASH AND REAM @ 17,456'.

### 24hr Activity

Com
ATTEMPTING TO WASH AND REAM @ 17,082'. PULL AND RACK BACK 1 STAND F/17,082 T/16,988'.
CIRCULATE @ 16,988'. BRINGING PUMP UP TO DRILL RATE SLOWLY. SPP 4000, WOB 5-8, TQ: 3-7K.
WASH AND REAM F/16,988' T/17,254. 266' @ 31.3 FPH. 250 GPM, 50-60 RPM, 3-8K TQ. INCREASED MUD WEIGHT F/12.7 T/12.8 PPG.
CIRCULATE WHILE SERVICING RIG AND TOP DRIVE.
WASH AND REAM F/17,254 T/ 17,456', 202 @ 16.8 FPH. 250 GPM, 50-60 RPM, 3-8K TQ.

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 8/29/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
12.80	56

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

**Daily Summary**

Report Start Date 8/29/2017 06:00	Report End Date 8/30/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 43,339.80	Cum Field Est To Date (Cost) 2,494,462.52
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Activity  
PICKING UP BHA.

**24hr Activity**

Com
WASH AND REAM F/17,456 T/ 17,480', 130/ 200 GPM, 35-60 RPM, 3-10K TQ. PULLED BACK UP TO 17,438' TO FREE PIPE FROM TORQUE. RE-START WASHING AND REAMING F/17,438' T/17,460'. MOTOR STALLING.
TOOH F/17,460' T/11,886" DUE TO MUD MOTOR STALLING, INCREASE IN DIFFERENTIAL PRESSURE. NO TIGHT SPOTS SEEN. HOLE TAKING PROPER FILL ON TRIP TANK.
REMOVE ROTATING RUBBER AND INSTALL TRIP NIPPLE.
TOOH F/11,886' T/ BHA. HOLE TAKING PROPER FILL ON TRIP TANK.
WORK BHA L/D ALL DIRECTIONAL TOOLS AND BIT #18.
CLEAN AND CLEAR RIG FLOOR.
SERVICE TOP DRIVE.
P/U MM 1.75", NMDC'S, UBHO SUB, MWD. TEST SAME (FAILED: PRESSURED UP TO 4,000 PSI). TROUBLESHOOT BHA: MM HAS INTERNAL FAILURE. L/D MWD AND MM.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/30/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.80	59

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

### Daily Summary

Report Start Date 8/30/2017 06:00	Report End Date 8/31/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 39,792.00	Cum Field Est To Date (Cost) 2,534,254.52
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Activity  
CIRC AT 13709'

### 24hr Activity

Com
INSTALL MWD AND TEST SAME, FUNCTION TESTED BOP'S AND M/U NEW BIT CLEAN RIG FLOOR TIH T/ 3098' P/U AND TESTED AGITATOR PSI BEFORE -1750 AFTER-2100' TIH T/ 12074' PULL TRIP NIPPLE AND INSTALL ROTATING HEAD SERVICE RIG AND TOP DRIVE TIH T/ 17321' FILLING DP EVERY 30 STDS. WASH AND REAM F/ 17321' T/ 17,474'. WOB-5-10K, SPM- 60, 140 GPM. HOLE STARTED PACKING OFF, PULL BACK UP T/ 17,303'. W/R 17,303' T/ 17,330'. W/R F/ 17,330' T/ 17,353' 5-10K TQ, 60 RPM, 140GPM. HOLE STARTED PACKING OFF. W/BR F/17,353' T/ 17,290'. W/R F/17,290' T/ 17,337' 5-10K TQ, 60 RPM, 110 GPM. DECIDED TO TOO H TO 13,600'. W/BR F/ 17,337' T/ 15,193' . 5-10K TQ, 60 RPM, 120-175 GPM. DUE TO TIGHT HOLE. TOOH F/ 15,193' T/13,589'. HOLE TOOK CALCULATED FILL. CIRCULATE SWEEPS FOR CLEAN UP CYCLE. 250 GPM, 100 RPM





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 8/31/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
12.80	57

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

### Daily Summary

Report Start Date 8/31/2017 06:00	Report End Date 9/1/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 38,661.00	Cum Field Est To Date (Cost) 2,572,915.52
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Activity  
W/R @ 13333' AT REDUCED RATES

### 24hr Activity

Com
TIH F/ 13,680' TO 15,657'
CLEAN UP CYCLE F/ 15,562' TO 15,657' GPM-247, PSI-4125, ROT-100, TQ. 3100-3300
TIH F/ 15,657' TO 16,600'
CLEAN UP CYCLE F/ 16,505' TO 16,600' GPM-247, PSI-4125, ROT-100, TQ. 3100-3300
TIH F/ 16,600' T/ 17,323'
W/R F/17,323' T/ 17,383', 130-175 GPM, 1400-3450 PSI, 70 RPM. HOLE PACKING OFF. W/BR F/ 17,383' T/ 17,135', 160 GPM, 100 RPM.
TOOH F/17,135' T/16,490'.
WEIGHTED UP TO 13.0 PPG. W/R F/16,490' T/16,670' 247 GPM, 4200 PSI 100 RPM, 3-6 K TQ.
W/R F/16,670' T/17,355' 247 GPM, 4200 PSI, 3-5K TQ, WHILE WEIGHTING UP TO 13.2 PPG. HOLE PACKING OFF. W/BR F/17,355' T/17,269' 130 GPM, 2,600 PSI, 80 RPM, 4-10K TQ. W/R F/17,269' T/ 13333' GPM-117, 1400 PSI, 80 RPM, 3K TQ.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/1/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
13.00	56

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) -89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

Daily Summary				
Report Start Date 9/1/2017 06:00	Report End Date 9/2/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 32,666.00
Cum Field Est To Date (Cost) 2,607,426.52				

Activity L/D BHA.

24hr Activity
Com
W/R F/17,333' T/17,375' 75-130 GPM, 700=2000 PSI, 3-10K TQ, 3-10 WOB, 40-80- RPM SERVICE RIG. W/R F/17,375' T/17,502' 75-130 GPM, 700-2000 PSI, 3-10K TQ, 3-10 WOB, 40-80 RPM. MW 13.2 PPG TOOH F/17,502' T/12,035'. DUE TO NO DIFFERENTIAL. HOLE TAKING PROPER FILL. REMOVE ROTATING RUBBER AND INSTALL TRIP NIPPLE. TOOH F/12,035' T/ BHA. HOLE TAKING PROPER FILL. L/D MM,MWD AND BIT #17.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/2/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
13.20	58

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

### Daily Summary

Report Start Date 9/2/2017 06:00	Report End Date 9/3/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 32,666.00	Cum Field Est To Date (Cost) 2,640,092.52
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Activity  
W/R @ AT FULL RATES 17154'

### 24hr Activity

Com
CLEAN AND CLEAR FLOOR. M/U BIT (SMITH 6 1/8 XR40PS #RJ1927) AND BIT SUB. TIH T/12,074'. HOLE GIVING PROPER DISPLACEMENT. FILL EVERY 30 STDS. REMOVE TRIP NIPPLE, INSTALL ROTATING HEAD. SERVICE RIG. TIH F/12,074' T/15,355'. HOLE GIVING PROPER DISPLACEMENT. FILL EVERY 30 STDS. CIRCULATE AND CONDITION MUD. TIH F/15,355' T/17,334'. HOLE GIVING PROPER DISPLACEMENT. FILL EVERY 30 STDS. W/R F/17,334 T/17,510', 86-100 GPM, 700-1000 PSI, 80 RPM, 5 WOB. INCREASED GPM TO 130. PACKED OFF. W/BR F/ 17,510' T/16,965' @ REDUCED RATES. W/R F/16,965" T/ WORK STANDS UNTIL WE GET 250 GPM, 3400 PSI, 3K TQ. @ 17154'

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 9/3/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
13.40	57

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

**Daily Summary**

Report Start Date 9/3/2017 06:00	Report End Date 9/4/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 53,808.02	Cum Field Est To Date (Cost) 2,693,900.54
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Activity  
W/R @ 17,350 AT FULL RATES.

**24hr Activity**

Com
WASH AND REAM F/ 17,152' TO 17,310' SPM-90, GPM-261, PSI-4000, TQ-.5K ( COULD NOT GET TO BITTM DUE TO HOLE PACKING OFF DECISION WAS MADE TO COME UP AND GET FULL RATES AND WT. UP F/ 13.4 PPG TO 13.8 PPG THEN TRY TO WASH AND REAM TO BITTM ) CIRCULATE AND WEIGHT UP F/13.4 T/13.8 PPG. @ 17,145'. W/R F/17,145' T/ 17350 . UNTIL WE GET FULL RATE OF 250 GPM. 3,550 PSI, 90 RPM. 3-6K TQ.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/4/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.00	57

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

### Daily Summary

Report Start Date 9/4/2017 06:00	Report End Date 9/5/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,541.0	Daily Field Est Total (Cost) 32,666.00	Cum Field Est To Date (Cost) 2,726,566.54
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Activity  
CIRC AND CLEAN HOLE @ 17542'

### 24hr Activity

Com
WASH AND REAM F/ 17350' TO 17,490' WHILE RAISING MUD WEIGHT UP F/14.0 T/14.2 PPG @ REDUCED RATES. SERVICE RIG.
WASH AND REAM F/ 17490' TO 17,523' WHILE RAISING MUD WEIGHT UP F/14.2 T/14.4 PPG @ REDUCED RATES. WASH AND REAM F/17,523 T/17,541 PLUS 1' DRILLED. INCREASING RATES TO 250 GPM, 90 RPM AS WORKING PIPE.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/5/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.40	59

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,086.00	93.80	163.20	11,944.05	-4,984.39	1,260.82	4,055.98	1.01
17,181.00	91.70	163.20	11,939.49	-5,075.23	1,288.24	4,129.72	2.21
17,275.00	89.90	162.00	11,938.18	-5,164.91	1,316.35	4,202.14	2.30
17,369.00	89.80	160.90	11,938.42	-5,254.03	1,346.25	4,273.34	1.18
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63

### Daily Summary

Report Start Date 9/5/2017 06:00	Report End Date 9/6/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 17,542.0	Daily Field Est Total (Cost) 43,059.68	Cum Field Est To Date (Cost) 2,769,626.22
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Activity  
S/C DRILL LINE.

### 24hr Activity

Com
WASH AND REAM AND CIRC POOH TO CASING SHOE PULLED ROTATING HEAD RUBBER AND INSTALLED TRIP NIPPLE POOH AND L/D BIT AND BIT SUB REMOVE WEAR BUSHING. TEST BOPE TO 10,000 PSI, HYDRIL TO 3,500 PSI. INSTALL WEAR BUSHING. CLEAN AND CLEAR FLOOR. P/U DIRECTIONAL BHA, TEST SAME. M/U BIT U513M. RIG SERVICE. TIH F/BHA T/3,000'. P/U AGITATOR (SERVICED BEFORE GOING IN HOLE). TIH F/ 3,000' T/ 12,065'. FILL EVERY 30 STANDS. HOLE GIVING CALCULATED DISPLACEMENT. SLIP AND CUT DRILL LINE.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/6/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
14.60	70

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) -89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,463.00	89.50	159.40	11,939.00	-5,342.44	1,378.17	4,343.14	1.63
17,492.00	89.10	159.70	11,939.35	-5,369.61	1,388.30	4,364.47	1.72
17,586.00	90.80	162.30	11,939.43	-5,458.48	1,418.90	4,435.19	3.30
17,680.00	92.50	165.10	11,936.73	-5,548.65	1,445.27	4,508.71	3.48
17,775.00	91.70	165.90	11,933.24	-5,640.56	1,469.04	4,584.83	1.19

Daily Summary				
Report Start Date 9/6/2017 06:00	Report End Date 9/7/2017 06:00	Footage (ftKB) 307.00	End Depth (ftKB) 17,849.0	Daily Field Est Total (Cost) 29,359.00
Cum Field Est To Date (Cost) 2,798,985.22				

Activity  
DRILL LATERAL @ 17,849'

24hr Activity
Com

CUT 104' OF DRILL LINE  
SERVICE RIG  
INSTALL ROTATING HEAD RUBBER  
TIH F/ 12090' TO 13100'  
CIRC 2000 STKS.  
TIH TO 14591'  
CIRC 2000 STKS.  
TIH TO 16035'  
CIRC 2000 STKS.  
TIH TO 17355'  
WASH AND REAM F/ 17355' TO 17542' ( DRILLED 2' OF NEW HOLE AND HOLE STARTED PACKING OFF HAD TO GO BACK TO OPENING HOLE AND WT. UP MUD TO 14.6 PPG ) WASH AND REAM F/ 17449' TO 17544'  
DRILL ROTATE F/17,544' T/17,564', 20' @ 13.3 FT/HR . WOB 18, RPM 65, TQ: 6800 K, SPP 4820, DIFF. 450, GPM 215, MMRPM 111.  
SLIDE F/17,564' T/17,567'.3' @ 3 FT/HR. WOB 42K, SPP 4450, SPM 75, GPM 215, MMRPM 111, DIFF- 140, TF 65R. ATTEMPTING TO SLIDE STACKING WEIGHT. UNABLE TO ESTABLISH CORRECT TFO.  
DRILL ROTATE F/17,567' T/17,610', 43' @ 43 FT/HR . WOB 18, RPM 65, TQ: 6800 K, SPP 4820, DIFF. 500, GPM 215, MMRPM 111.  
TROUBLE SHOOT & DOWN LINK MWD TOOL  
DRILL ROTATE F/17,610' T/17,747', 137' @ 39 FT/HR . WOB 18, RPM 65, TQ: 6800 K, SPP 4825, DIFF. 350, GPM 215, MMRPM 111.  
SLIDE F/17,747' T/17,755'.8' @ 8 FT/HR. WOB 48K, SPP 4650, SPM 75, GPM 215, MMRPM 111, DIFF- 150, TF 170L.  
DRILL ROTATE F/17,755' T/17,842', 87' @ 58 FT/HR . WOB 18, RPM 65, TQ: 6800 K, SPP 4820, DIFF. 350, GPM 215, MMRPM 111.  
SLIDE F/17,842' T/17,849'.7' @ 7 FT/HR. WOB 45K, SPP 4650, SPM 75, GPM 215, MMRPM 111, DIFF- 150, TF 170L.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/7/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
14.60	65

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) -89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,492.00	89.10	159.70	11,939.35	-5,369.61	1,388.30	4,364.47	1.72
17,586.00	90.80	162.30	11,939.43	-5,458.48	1,418.90	4,435.19	3.30
17,775.00	91.70	165.90	11,935.31	-5,640.17	1,470.66	4,583.86	1.96
17,869.00	92.30	168.30	11,932.03	-5,731.74	1,491.63	4,660.71	2.63
17,963.00	93.80	170.40	11,927.03	-5,823.98	1,508.97	4,739.56	2.74

Daily Summary				
Report Start Date 9/7/2017 06:00	Report End Date 9/8/2017 06:00	Footage (ftKB) 233.00	End Depth (ftKB) 18,082.0	Daily Field Est Total (Cost) 40,487.00
Cum Field Est To Date (Cost) 2,849,922.66		Activity POOH F/ PSI LOSS @ 8,800'		

24hr Activity
Com
ROTATE F/ 17,849' TO 17,935' WOB-17, ROP-43, SPM-78, PSI-4860, DIFF-350, GPM-225, TQ.-6K SLIDE F/ 17,935' TO 17,948' WOB-50, ROP-4', SPM-73, PSI-4300, DIFF-20, GPM-215, TF-120L ROTATE F/ 17,948' TO 18,020' WOB-18, ROT-65, ROP-36, SPM-78, PSI-4860, DIFF-350, GPM-225, TQ-6-8K SLIDE F/ 18,020' TO 18,025' WOB-50, ROP-3, SPM-60, PSI-4000, DIFF-10, GPM-200, TF-150L SERVICE RIG SLIDE F/ 18,025' TO 18,028' (3) WOB-50, ROP-1.5' FPH SPM-70, PSI-4000, DIFF-10, GPM-200, TF-150L ROTATE F/ 18,028' TO 18,029' (1) WOB-18, ROT-65, ROP-2 FPH, SPM-78, PSI-4860, DIFF-350, GPM-225, TQ-6-8K SLIDE F/ 18,029' TO 18,039' (10) WOB-50, ROP-5' FPH SPM-70, PSI-4000, DIFF-10, GPM-200, TF-120L ROTATE F/ 18,039' TO 18,045' (6') WOB-18, ROT-65, ROP-12 FPH, SPM-78, PSI-4860, DIFF-350, GPM-225, TQ-6-8K SLIDE F/ 18,045' TO 18,060' (15) WOB-50, ROP-15' FPH SPM-70, PSI-4000, DIFF-10, GPM-200, TF-120L ROTATE F/ 18,060' TO 18,067' (7') WOB-18, ROT-65, ROP-14 FPH, SPM-75, PSI-4260, DIFF-350, GPM-217, TQ-6-8K SLIDE F/ 18,067' TO 18,082' (15) WOB-50, ROP-10' FPH SPM-70, PSI-4050, DIFF-10, GPM-200, TF-120L. ( WHILE SLIDING HAD A 400 PSI LOSS, CHECKED SPR WAS ALSO THE SAME LOSS IN PSI) ON BOTTOM PSI WAS 4200 @ 217 GPM THEN FELL OF TO 3800 @ 217 GPM TOOK APPROXIMATLEY 8-10 MINUTES FOR PSI TO FALL OFF NEVER REGAINED ON BTM PSI @ 217 GPM. POOH F/ 18,082 T/ 8,800' TO INSPECT STRING & BHA FOR PSI LOSS ( DISCOVERED WASH OUT ON BACKED OUT PIN ON STND #10)





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/8/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.60	65

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,492.00	89.10	159.70	11,939.35	-5,369.61	1,388.30	4,364.47	1.72
17,586.00	90.80	162.30	11,939.43	-5,458.48	1,418.90	4,435.19	3.30
17,775.00	91.70	165.90	11,935.31	-5,640.17	1,470.66	4,583.86	1.96
17,869.00	92.30	168.30	11,932.03	-5,731.74	1,491.63	4,660.71	2.63
17,963.00	93.80	170.40	11,927.03	-5,823.98	1,508.97	4,739.56	2.74

### Daily Summary

Report Start Date 9/8/2017 06:00	Report End Date 9/9/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,082.0	Daily Field Est Total (Cost) 71,926.00	Cum Field Est To Date (Cost) 2,921,848.66
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Activity  
TIH RETORQUING DRILL PIPE CONNECTIONS @ 15,150'

### 24hr Activity

Com
POOH TO AGITATOR L/D AGITATOR AND SHOCK SUB FOOH TO DIRECTIONAL TOOLS L/D BIT, MUD MTR., AND MWD REMOVE AND INSTALL WEAR BUSHING AND FUNCTION TESTED BOP'S P/U MUD MTR., MWD AND TESTED SAME M/U BIT AND TIH BREAKING EVERY JT. AND RETORQUING SAME DUE TO BACK OFF WHILE SLIDING WHICH CAUSED WASH OUT P/U AGITATOR AND CHECKED PRESSURE BEFORE AND AFTER 1800# BEFORE AND 2150# AFTER TIH F/ BHA T/ 15,150' BREAK OUT AND REDOPE ALL DRILL PIPE TO PROPER TRQ TO PREVENT STRING FROM BACKING OFF DURING SLIDING. 4" DP WAS ORIGINALLY TRQ TO 17,500 FTBS RE-TRQ T/ 22,000 FTBS AS PER WEATHERFORD SPEC RECOMMENDATIONS



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/9/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.60	65

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,492.00	89.10	159.70	11,939.35	-5,369.61	1,388.30	4,364.47	1.72
17,586.00	90.80	162.30	11,939.43	-5,458.48	1,418.90	4,435.19	3.30
17,775.00	91.70	165.90	11,935.31	-5,640.17	1,470.66	4,583.86	1.96
17,869.00	92.30	168.30	11,932.03	-5,731.74	1,491.63	4,660.71	2.63
17,963.00	93.80	170.40	11,927.03	-5,823.98	1,508.97	4,739.56	2.74

### Daily Summary

Report Start Date 9/9/2017 06:00	Report End Date 9/10/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,082.0	Daily Field Est Total (Cost) 31,091.00	Cum Field Est To Date (Cost) 2,952,939.66
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Activity  
SLIP CUT DRLG LINE & WAIT ON WFR FISHING TOOLS

### 24hr Activity

Com

TIH F/ 15,150' T/ 17,341' BREAK OUT AND REDOPE ALL DRILL PIPE TO PROPER TRQ TO PREVENT STRING FROM BACKING OFF DURING SLIDING. 4" DP WAS ORIGINALLY TRQ TO 17,500 FTBS RE-TRQ T/ 22,000 FTBS AS PER WEATHERFORD SPEC RECOMMENDATIONS

WASH & REAM F/ 7,341' T/ 18,082' . ATTEMPT TO GET BACK TO DRILLING FAILED DUE TO POSSIBLE MOTOR FAILURE. ATTEMPTING TO DRILL DRILL STRING WAS TAKING WEIGHT AND NOT DRILLING OFF

TOH F/ 18,082 T/ 12,161'. MTR TWISTED OFF ON SAVER SUB PIN THAT MAKES UP IN TO STATOR ON MTR . LEFT 22.20' OF MTR PLUS 6 1/8" PDC BIT IN HOLE , TOF @ 18,059'

REMOVE ROTATING HEAD & INSTALL TRIP NIPPLE

TOH F/ 12,161 T/ BHA. DISCOVERED MTR TWISTED OFF ON SAVER SUB PIN THAT MAKES UP IN TO STATOR ON MTR . LEFT 22.17' OF MTR PLUS 6 1/8" PDC BIT IN HOLE , TOF @ 18,059'

BREAK OUT & L/D DIRECTIONAL TOOLS & MWD

SLIP & CUT 62' OF DRILLING WHILE WAITING ON WFR FISHING TOOLS AND FISHERMAN

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 9/10/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)
14.60	79

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,492.00	89.10	159.70	11,939.35	-5,369.61	1,388.30	4,364.47	1.72
17,586.00	90.80	162.30	11,939.43	-5,458.48	1,418.90	4,435.19	3.30
17,775.00	91.70	165.90	11,935.31	-5,640.17	1,470.66	4,583.86	1.96
17,869.00	92.30	168.30	11,932.03	-5,731.74	1,491.63	4,660.71	2.63
17,963.00	93.80	170.40	11,927.03	-5,823.98	1,508.97	4,739.56	2.74

**Daily Summary**

Report Start Date 9/10/2017 06:00	Report End Date 9/11/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,082.0	Daily Field Est Total (Cost) 42,406.00	Cum Field Est To Date (Cost) 2,995,345.66
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Activity  
TOH TO INSPECT OVER SHOT @ 1100'

**24hr Activity**

Com
SLIP AND CUT DRILL LINE
SERVICE RIG
WAIT ON FISHING TOOLS
UNLOADED STRAP AND P/U AND M/U OVER SHOT WITH 4 3/4 GRAPPLE AND PUMP OUT SUB AND FLOAT SUB
TIH W/ 5 STDS OUT OF DERRICK
PICKED UP SCHLUMBERGER DRILLING JARS
TIH FILLING DRILL PIPE EVERY 30 STDS.
WASH TO TOP OF FISH F 17,306 T/ 18,065
WASH OVER FISH @ 18,065, 200 GPM , 2800 PP , 3100-7000 TRQ
TOH F/ 18,065 T/ 1100' TO INSPECT OVER SHOT

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 9/11/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
14.60	79

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 8/13/2017	Description SIDE TRACK 2	EW Tie In (ft) 0.10	NS Tie In (ft) -89.20	Azimuth Tie In (°) 202.2	Inclination Tie In (°) 47.0	MD Tie In (ftKB) 11,867.00	TVD Tie In (ftKB) 11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,492.00	89.10	159.70	11,939.35	-5,369.61	1,388.30	4,364.47	1.72
17,586.00	90.80	162.30	11,939.43	-5,458.48	1,418.90	4,435.19	3.30
17,775.00	91.70	165.90	11,935.31	-5,640.17	1,470.66	4,583.86	1.96
17,869.00	92.30	168.30	11,932.03	-5,731.74	1,491.63	4,660.71	2.63
17,963.00	93.80	170.40	11,927.03	-5,823.98	1,508.97	4,739.56	2.74

Daily Summary				
Report Start Date 9/11/2017 06:00	Report End Date 9/12/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,082.0	Daily Field Est Total (Cost) 37,467.00
Cum Field Est To Date (Cost) 3,030,062.66				

Activity  
WAIT ON 5 7/8" OVERSHOT ASSEMBLY

24hr Activity
Com

L/D 4 7/8 OVER SHOT W/ 4 3/4 GRAPPLE  
P/U AND M/U 5 7/8 OVER SHOT W/ 4 3/4 GRAPPLE  
SERVICE RIG  
TIH W/ OVER SHOT FILLING DRILL PIPE EVERY 30 STDS.  
WASH & REAM F/ 18,000' T/ 18,065  
WORK OVER SHOT ON TO FISH @ 18,065 . INCREASE IN PP BY 500 PSI INCREASE IN STRING DRAG BY 47K  
TOH F/ 18,065 T/ OVER SHOT. INSPECT OVERSHOT ( NO FISH RETRIEVED)  
BREAK DOWN AND L/D 5 7/8" OVER SHOT ( WHILE BREAKING DOWN OVERSHOT BOWL WAS DAMAGED BY TONGS)  
WAIT ON 5 7/8" OVERSHOT ASSEMBLY



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/12/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.60	79

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
8/13/2017	SIDE TRACK 2	0.10	-89.20	202.2	47.0	11,867.00	11,779.34
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,314.00	81.90	197.30	11,960.15	-449.70	-161.59	394.88	9.90
12,345.00	83.00	192.80	11,964.23	-479.37	-169.56	425.36	14.82
12,376.00	84.00	188.40	11,967.74	-509.63	-175.23	455.53	14.47
12,408.00	84.70	183.80	11,970.89	-541.29	-178.61	486.11	14.47
12,439.00	85.30	179.20	11,973.59	-572.15	-179.42	514.99	14.91

### Daily Summary

Report Start Date 9/12/2017 06:00	Report End Date 9/13/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,457.0	Daily Field Est Total (Cost) 63,587.49	Cum Field Est To Date (Cost) 3,093,650.15
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Activity  
LAY OUT DIRECTIONAL BHA

### 24hr Activity

Com
WAIT ON NEW OVER SHOT SERVICE RIG STRAP AND M/U OVER SHOT AND DRESSED IT WITH 4 3/4" GRAPPLE TIH F/ FISHING TOOLS T/ 12,090.0 REMOVE ROTATING HEAD INSTALL TRIP NIPPLE TIH F/ 12,090.0 T/ 17,000 BREAK CIRCULATION W/ 2050 STKS STAND DOWN SAFETY MTG W/ XTO SAFETY REP EAMMON YOUNG TIH F/ 17,000 T/ 17,937' WASH F/ 17,937 T/ 18,082 TOP OF FISH WORK OVER SHOT ONTO FISH @ 18,065 TOH F/ 18,065 T/ 12,096 TO INSPECT OVER SHOT REMOVE TRIP NIPPLE , INSTALL ROTATING HEAD TOH F/ 12,096 T/ FISHING TOOLS ( NO FISH RETRIEVED) BREAK DOWN AND LAY OUT FISHING TOOLS CLEAR RIG FLOOR OF OBM , PREP FLOOR TO PICK UP DIRECTIONAL BHA CHECK TRQ ON TOP DRIVE ALL INDICATIONS TRQ LIMITS WERE CORRECT LAY OUT DIRECTIONAL TOOLS



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/13/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.70	79

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/14/2017	Description MWD	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,502.00	0.00	0.00					

### Daily Summary

Report Start Date 9/13/2017 06:00	Report End Date 9/14/2017 06:00	Footage (ftKB) 4.00	End Depth (ftKB) 12,506.0	Daily Field Est Total (Cost) 31,403.00	Cum Field Est To Date (Cost) 3,126,549.51
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Activity  
TIME DRILL SIDETRACK #3 @ 12,506'

### 24hr Activity

Com
PICK UP QES 4 3/4" MOTOR, 7:8 LOBE, 3.8 STAGE, 2.12° FIXED 0.521 REV/GAL. BIT TO BEND 4.20', BIT TO SURVEY 48', BIT TO GAMMA 35', M/U UBHO, MONELS, X-O, SCRIBE MOTOR, INSTALL NEW MULE SHOE IN UBHO INSTALL MWD AND SURFACE TEST SAME {OK}. MAKE UP BAKER HUGHES 6 1/8" STX-44C SER. # 5272497. TOTAL BHA 93.04'.
TIH F/93.04' T/11,398'. HOLE GIVING PROPER DISPLACEMENT. FILLING PIPE EVERY 30 STANDS.
PULL TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT.
TIH F/11,398' T/12,055'. HOLE GIVING PROPER DISPLACEMENT. FILL PIPE.
HELD PJSM WITH RIG CREW ON CHANGING OUT DRILL LINE.
SLIP AND RE-STRING BLOCKS WITH NEW DRILL LINE. 1500' +/-
SERVICE RIG & TOP DRIVE
TIH F/12,055' T/12,463'. HOLE GIVING PROPER DISPLACEMENT. FILL PIPE.
ORIENT TOOLFACE TO 175L
BUILD TROUGH F/ 12,463' TO 12,502' (39') 7.8' FPH , WOB 5 , GPM 225 , PP 3000 , DIFF 75 , TFO 175L
ORIENT TOOLFACE TO 175L
TIME DRILL ON SIDE TRACK # 3 F/12,502' T/ 12,506' (4') 1.1' FPH , WOB 25 , GPM 225, PP 3400 , DIFF 175 , TFO 175L ( 10'@ 5 MIN. PER INCH)



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/14/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.70	67

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/14/2017	Description MWD	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,502.00	0.00	0.00					

### Daily Summary

Report Start Date 9/14/2017 06:00	Report End Date 9/15/2017 06:00	Footage (ftKB) 38.00	End Depth (ftKB) 12,544.0	Daily Field Est Total (Cost) 33,160.00	Cum Field Est To Date (Cost) 3,159,709.51
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Activity  
SLIDE DRILLING @ 12,544 WORKING TF TO HI-SIDE

### 24hr Activity

Com
TIME DRILL ON SIDE TRACK # 3 F/12,506' T/ 12,512' . WOB 25 , GPM 225, PP 3400, DIFF 175, MMRPM 117, TFO 175L { 6' @ 5 MIN. PER INCH } TIME DRILL F/12,512' T/12,520' { 8' @ 4 MIN. PER INCH } TIME DRILL F/12,520' T/12,526' { 6' @ 3 MIN. PER INCH } TIME DRILL F/12,526' T/12,531' { 5' @ 2 MIN. PER INCH } .
SLIDE / COMING OFF SIDE TRACK #3 F/12,531' T/12,534' @ GTF 140R; F/12,534' T/12,538' @ GTF 120°R; F/12,538' T/12,540' GTF 90°R; F/12,540' T/12,544' @ GTF 60°R; (13') 3.7' FPH , WOB 35K, GPM 225, OFF BTM PP 3400 , ON BTM PP 3550 , DIFF 150, MTR RPM 117

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 9/15/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
14.80	70

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 9/14/2017	Description SIDETRACK #3	EW Tie In (ft) -173.71	NS Tie In (ft) -634.67	Azimuth Tie In (°) 169.9	Inclination Tie In (°) 86.9	MD Tie In (ftKB) 12,502.00	TVD Tie In (ftKB) 11,977.78
MD (ftKB) 12,570.00	Incl (°) 87.90	Azm (°) 176.80	TVD (ftKB) 11,980.87	NS (ft) -702.10	EW (ft) -165.85	VS (ft) 678.18	DLS (°/100ft) 10.24

Daily Summary				
Report Start Date 9/15/2017 06:00	Report End Date 9/16/2017 06:00	Footage (ftKB) 76.00	End Depth (ftKB) 12,620.0	Daily Field Est Total (Cost) 52,822.00
Cum Field Est To Date (Cost) 3,212,531.51				

Activity  
TIH W/ DIRECTIONAL TOOLS @ 10,550'

**24hr Activity**

Com

SLIDE / COMING OFF SIDE TRACK #3 F/12,544' T/12,546' @ GTF 60R; F/12,546' T/12,553' @ GTF 50°R; F/12,553' T/12,558' GTF 30°R; F/12,558' T/12,589' @ HS; (45') 5.6 FPH, WOB 35K, GPM 225, OFF BTM PP 3650, ON BTM PP 3750, DIFF 100, MTR RPM 117

DRILL ROTATE F/12,589' T/12,620', 31' @ 20.7 FT/HR. WOB 15, RPM 25, TQ: 4520 K, SPP 3750, DIFF. 100, GPM 225, MMRPM 117.

SERVICE RIG, TOP DRIVE, CIRCULATE.

PUMP SLUG, CHECK FLOW, POOH F/12,620' T/12,090'. HOLE TAKING PROPER FILL ON TRIP TANK. PULLED SLICK THRU SIDETRACK.

PULL ROT. HEAD ELEMENT, INSTALL TRIP NIPPLE.

POOH F/12,090' T/93'. HOLE TAKING PROPER FILL ON TRIP TANK.

DRAIN MTR, BREAK BIT, REMOVE MWD & L/D 4 3/4" X-O, 2- 4-3/4" NMDC'S, 5" UBHO SUB, 1- QES 4 3/4" MOTOR, MWD & 6-1/8" INSERT BIT (FUNCTION TEST BOP'S)

CLEAN FLOOR OF HANDLING TOOLS & OBM

UNLOAD AND LAY OUT DIRECTIONAL TOOLS ON RACKS, CALIPER & STRAP ALL TOOLS

MAKE UP QES 4 3/4" MOTOR, 7:8 LOBE, 3.8 STAGE, 1.75° FIXED 0.521 REV/GAL. BIT TO BEND 4.16', BIT TO SURVEY 48', BIT TO GAMMA 35', M/U UBHO, MONELS, X-O, SCRIBE MOTOR, INSTALL NEW MULE SHOE IN UBHO INSTALL MWD AND SURFACE TEST SAME {OK}. MAKE UP SECURITY PDC 6 1/8" GT54D SER. # 12936741. TOTAL BHA 90.98'.

CHANGE OUT BURN IN SUB ON TOP DRIVE

TIH F/ 90' T/2,979'. P/U AGITATOR. TEST AGITATOR & MWD CHECKED PRESSURE BEFORE AND AFTER 1450# BEFORE AND 1800# AFTER {OK}

FILL EVERY 30 STANDS. HOLE GIVING CALCULATED DISPLACEMENT.

TIH F/ 2,979' T/ 10,550'. FILL EVERY 30 STANDS. HOLE GIVING CALCULATED DISPLACEMENT.





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/16/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
14.90	71

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 9/17/2017	Description SIDETRACK #4	EWTie In (ft) -127.19	NSTie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

Daily Summary				
Report Start Date 9/16/2017 06:00	Report End Date 9/17/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,227.0	Daily Field Est Total (Cost) 45,638.00
Cum Field Est To Date (Cost) 3,258,169.51				

Activity  
ORIENT TOOL TO BUILD TROUGH F/12,180'

24hr Activity
Com

TIH F/10,550' T/12,090'. HOLE GIVING PROPER DISPLACEMENT.  
PULL TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT.  
TIH F/12,090' T/12,463'. HOLE GIVING PROPER DISPLACEMENT.  
FILL PIPE, RE-CYCLE PUMP, ORIENT TOOL FACE TO 175L.  
WASH DOWN F/12,463' T/12,568'. CHECK SHOT SURVEY DEPTH 12,520' INC. 86.6°, AZM: 173.2°.  
RE-TORQUE BURN SUB, BROKE OUT ON TOP DRIVE INSTEAD OF DRILL PIPE.  
WASH AND ROTATE DOWN F/12,568' T/12,631'. WOB 2, RPM 50, TQ: 2285 K, SPP 4285, DIFF. 100, GPM 230, MMRPM 120. CHECK SHOT SURVEY DEPTH 12,583' INC.89.9°, INC: 163°.  
PULL BACK UP TO 12,599' CHECK SHOT DEPTH 12,551' INC.87.1°, AZM: 168.5°. PUT STAND IN MOUSE HOLE. PULL UP T/12,472' CHECK SHOT 12,424' INC. 84.9°, AZM: 181.7°. ORIENT TOOL AND MAKE SEVERAL ATTEMPTS TO GET INTO SIDETRACK #3. NO SUCCESS. { NOTIFY FIELD SUPERINTENDANT }.  
SERVICE RIG AND TOP DRIVE.  
ORIENT TOOL FACE, ATTEMPT TO FIND SIDETRACK #3. GO IN F/12,472' T/12,631'. WASH DOWN F/12,631' T/12,662'. CHECK SHOT 12,614' INC. 90.1°, AZM: 162.7°. RUN 1 STAND OUT OF DERRICK F/12,662' T/12,725'. { WAS DISCIED TO POOH }.  
CIRCULATE AND BUILD SLUG.  
PUMP SLUG, CHECK FLOW, POOH F/12,725' T/12,090'. HOLE TAKING PROPER FILL ON TRIP TANK.  
PULL ROT. HEAD ELEMENT, INSTALL TRIP NIPPLE.  
POOH F/12,090' T/90.98'. LAID DOWN AGITATOR. HOLE TAKING PROPER FILL ON TRIP TANK.  
DRAIN MTR , BREAK BIT , REMOVE MWD & L/D 1- QES 4 3/4" MOTOR, 6-1/8" PDC ( FUNCTION TEST BOP'S)  
MAKE UP QES 4 3/4" MOTOR, 7:8 LOBE, 3.8 STAGE, 2.38° FIXED 0.521 REV/GAL. BIT TO BEND 4.45', BIT TO SURVEY 49', BIT TO GAMMA 35', M/U UBHO, MONELS, X-O, SCRIBE MOTOR, INSTALL NEW MULE SHOE IN UBHO INSTALL MWD AND SURFACE TEST SAME {OK}. MAKE UP BAKER I 6 1/8"STX-44C INSERT {SER. # 5272497}. TOTAL BHA 90.86'.  
TIH F/ 90' T/ 12,053', FILLING DRILL PIPE EVERY 30 STANDS , HOLE GIVING PROPER DISPLACEMENT  
REMOVE TRIP NIPPLE , INSTALL ROTATING HEAD ELEMENT  
TIH F/ 12,053' T/ 12,180', FILLING DRILL PIPE EVERY 30 STANDS , HOLE GIVING PROPER DISPLACEMENT  
ORIENT TOOL & START WORKING TO BUILD TROUGH F/ 12,180' TO 12,227' WOB 6 , GPM 225 , PP 3650 , DIFF 75 , TFO 175L



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/17/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.90	64

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 9/17/2017 06:00	Report End Date 9/18/2017 06:00	Footage (ftKB) 18.00	End Depth (ftKB) 12,245.0	Daily Field Est Total (Cost) 36,654.00	Cum Field Est To Date (Cost) 3,294,823.51
Activity TIME DRILL @ 12,245' @ 4 MIN. PER INCH					

### 24hr Activity

Com
ORIENT TOOL & BUILD TROUGH F/12,180' T/12,227' 47' @ 5.8 FT/HR. WOB 6 , GPM 225 , PP 3650 , DIFF 75 , TFO 175L TIME DRILL ON SIDE TRACK # 4 F/12,227' T/ 12,237' . WOB 3 , GPM 225, SPP 3550, DIFF 115, MMRPM 117, TFO 175L { 10' @ 5 MIN. PER INCH } TIME DRILL F/12,237' T/12,245' { 8' @ 4 MIN. PER INCH } WOB 19 , GPM 225, SPP 3350, DIFF 75, MMRPM 117, TFO 175L



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/18/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.80	67

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 9/18/2017 06:00	Report End Date 9/19/2017 06:00	Footage (ftKB) 21.00	End Depth (ftKB) 12,266.0	Daily Field Est Total (Cost) 52,504.60	Cum Field Est To Date (Cost) 3,394,437.66
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Activity  
RIH W/ 5.76" CASING GUAGE RING

### 24hr Activity

Com
TIME DRILL F/12,245' T/12,251' { 6' @ 3 MIN. PER INCH } WOB 19 , GPM 225, SPP 3350, DIFF 75, MMRPM 117, TFO 175L TIME DRILL F/12,251' T/12,256' { 5' @ 2 MIN. PER INCH } WOB 19 , GPM 225, SPP 3350, DIFF 75, MMRPM 117, TFO 175L SLIDE/COMING OFF SIDE TRACK #4 F/12,256' T/12,261' @ GTF 175R; F/12,261' T/12,266' @ GTF 145°R; (10') 2.9 FPH , WOB 32K, GPM 225, OFF BTM PP 3350 , ON BTM PP 3420, DIFF 70, MTR RPM 117. BIT WEIGHT FELL OFF, MOTOR STALLED. INDICATION OF BEING IN ORIGINAL HOLE BY SURVEY INFORMATION. CIRCULATING WAITING ON ORDERS FROM OFFICE. SERVICE RIG AND TOP DRIVE WHILE WAITING ON ORDERS FROM OFFICE. CIRCULATING WAITING ON ORDERS FROM OFFICE. PUMP SLUG, CHECK FLOW, POOH F/12,266' T/12,090'. HOLE TAKING PROPER FILL ON TRIP TANK. PULLED SLICK THRU SIDETRACK. REMOVE ROTATING HEAD , INSTALL TRIP NIPPLE POOH F/12,090' T/BHA. HOLE TAKING PROPER FILL ON TRIP TANK. DRAIN MTR , BREAK BIT , REMOVE MWD & L/D 4 3/4" X-O , 2- 4-3/4" NMDC'S , 5" UBHO SUB , 1- QES 5" MOTOR, MWD & 6-1/8" INSERT BIT ( FUNCTION TEST BOP'S) CLEAR FLOOR OF ALL HAND TOOLS & OBM R/U STRATEGIC SHEAVES & THREAD WIRELINE. M/U TOOLS RIH W/ 3-1/8" CCL , 5' SINKER BAR , 7' SINKER BAR , JUNK BSKT & 5.76" GUAGE RING



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/19/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.80	67

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 9/19/2017 06:00	Report End Date 9/20/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,266.0	Daily Field Est Total (Cost) 34,713.00	Cum Field Est To Date (Cost) 3,429,150.66
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Activity  
P/U DIRECTIONAL TOOLS

### 24hr Activity

Com
RIH W/ 3-1/8" CCL , 5' SINKER BAR , 7' SINKER BAR , JUNK BSKT & 5.76" GUAGE RING. POOH WITH WIRELINE T/5,000'. HYDRAULIC HOSE BLEW ON WIRELINE TRUCK WHILE PULLING OUT OF HOLE. REPAIRED HOSE. CONTINUE POOH WITH WIRELINE. FUNCTION BOP'S. RIG DOWN WIRE LINE TRUCK. SERVICE RIG AND TOP DRIVE. ORDERS FROM OFFICE TO MAKE UP BIT BAKER HUGHES 6 1/8"STX-44C INSERT (SER. # 5272497), BIT SUB, AND TIH WITH DRILL PIPE TO ATTEMPT TO RE-ENTER SIDETRACK # 2. F/SURFACE T/ 12,090'. HOLE GIVING PROPER DISPLACEMENT. FILL PIPE EVERY 30 STANDS. REMOVE TRIP NIPPLE , INSTALL ROT. HEAD ELEMENT TIH WITH DRILL PIPE TO ATTEMPT TO RE-ENTER SIDETRACK # 2. F/12,090' T/ 12,625'. HOLE GIVING PROPER DISPLACEMENT. FILL PIPE EVERY 30 STANDS. ( STRING WOULD NOT WORK PAST THIS POINT @ 12,625') 134 STANDS+ BHA TOH F/12,625' T/12,065'. HOLE TAKING PROPER FILL ON TRIP TANK. PULLED SLICK OFF BOTTOM. REMOVE ROT. HEAD , INSTALL TRIP NIPPLE TOH F/12,065' T/9,925'. HOLE TAKING PROPER FILL ON TRIP TANK. (STRING STARTED PULLING WET). MIX & PUMP SLUG ( CHECK FOR FLOW-NO FLOW) TOH F/9,925' T/BHA'. HOLE TAKING PROPER FILL ON TRIP TANK. PICK UP AND MAKE UP DIRECTIONAL BHA. QES 4 3/4" MOTOR, 7:8 LOBE, 3.8 STAGE, 2.38° FIXED 0.521 REV/GAL. BIT TO BEND 4.45', BIT TO SURVEY 49', BIT TO GAMMA 35', M/U UBHO, MONELS, X-O, SCRIBE MOTOR.

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 9/20/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
14.80	64

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

Daily Summary				
Report Start Date 9/20/2017 06:00	Report End Date 9/21/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,807.0	Daily Field Est Total (Cost) 52,641.60

Cum Field Est To Date (Cost) 3,481,792.26
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Activity S/C DRILL LINE.
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24hr Activity
Com

FINISH MAKING UP BHA.INSTALL MWD AND SURFACE TEST SAME {OK}. MAKE UP BAKER 6 1/8"STX-44C INSERT {SER. # 5272497}. TOTAL BHA 90.86'.

TIH F/90.86' T/12,090'. HOLE GIVING PROPER DISPLACEMENT. FILL PIPE EVERY 30 STANDS.

PULL TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT.

TIH F/12,090' T/12,144' ORIENT TOOL FACE TO HIGH SIDE. TIH F/12,144' T/12,492'. SIDETRACK #3. ORIENT TOOL FACE TO LS. TIH F/12,492' T/12,589' TAKING 20/25K SLACK OFF WEIGHT, FILL PIPE AND GET SURVEY. { SURVEY DEPTH 12,540' INC. 83.4° AZM: 176.8°. GO IN T/12,620' SURVEY DEPTH 12,571' INC. 87.9° AZM: 176.8°. CONTINUE IN HOLE WASHING @ 150 GPM WENT T/12,650' SURVEY DEPTH 12,601' INC.89.7° AZM: 163°. SIDETRACK #2. CONTINUED IN HOLE CONFIRMING SURVEY'S OF SIDETRACK #2 LATERAL T/12,713' SURVEY DEPTH 12,664' INC.90° AZM: 162°. T/12,807' SURVEY DEPTH 12,758' INC. 90.8° AZM: 161.6° }.

CIRCULATE @ 12,807'. GPM 168, SPP 2390. WAITING ON ORDERS. WILL POOH AND PICK UP 1.5° FIXED BEND MUD MOTOR AND TIH TO ENTER SIDETRACK #2 LATERAL.

POOH F/12,807' T/12,525'

WORK PIPE THRU TOP OF SIDETRACK #3 F/12,525' T/12,492' {5 TIMES}. GPM 168, SPP 2390, RPM 15, MMRPM 87.

POOH F/12,492 T/12,090'.

PUMP SLUG, CHECK FLOW. PULL ROT. HEAD ELEMENT, INSTALL TRIP NIPPLE.

POOH F/12,090' T/SURFACE. HOLE TAKING PROPER FILL ON TRIP TANK. FUNCTION BOP'S.

L/D MWD, 2.38\* MM AND BIT. P/U 1.50\* MM, MWD AND TEST SAME. M/U BAKER/HUGHES 6 1/8" STX-44C SER # 5272499.

SERVICE RIG. C/C RIG FLOOR.

TIH F/ BHA T/ 12,053'. FILL EVERY 30 STDS. HOLE GIVING CALCULATED DISPLACEMENT.

REMOVE TRIP NIPPLE AND INSTALL ROTATING RUBBER.

S/C DRILL LINE 112'.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/21/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.80	63

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 9/21/2017 06:00	Report End Date 9/22/2017 06:00	Footage (ftKB) 4,681.00	End Depth (ftKB) 17,488.0	Daily Field Est Total (Cost) 51,839.31	Cum Field Est To Date (Cost) 3,533,631.57
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Activity  
WASH AND BACK REAM @ 17,278

### 24hr Activity

Com
FINISH CUTTING DRILL LINE. CALIBRATE BLOCK HEIGHT. SERVICE TOP DRIVE, RIG, GREASE BLOCK'S AND CROWN. TIH T/12,196', FILL PIPE, ORIENT TOOL FACE HS. TIH T/12,502', ORIENT TOOL FACE LS. TIH T/12,650'. RE-CYCLE PUMP AND CONFIRM SURVEY.  WORK PIPE F/ 12,650' T/12,497'. WORK PIPE F/12,497' T/12,525' X3 THRU SIDE TRACK # 3. TIH T/12,807' AND CONFIRM SURVEY WITH SIDE TRACK # 2. ATTEMPTED TO SLIDE INTO HOLE @ F/12,807' T/12,885'. TAKING WEIGHT TO PUSH DOWN. WASH AND REAM F/12,885' T/13,677'. WOB 5/7K, GPM 205, SPP 3425, RPM 50, MMRPM 107. CIRCULATE BOTTOMS UP WORK STAND @ 13,677'. GPM 205, SPP 3425, RPM 50, MMRPM 107. WASH AND REAM F/13,677' T/15,160'. WOB 5/7K, GPM 205, SPP 3425, RPM 50, MMRPM 107. CIRCULATE BOTTOMS UP WORK STAND @ 15,160'. GPM 205, SPP 3425, RPM 50, MMRPM 107. WASH AND REAM F/15,160' T/ 17,488'. WOB 5/7K, GPM 202, SPP 3425, RPM 55, MMRPM 103. HOLE STARTED PACKING OFF. ATTEMPTING TO WASH AND BACKREAM RE-GAIN GOOD CIRCULATION F/17,488' T/17278'. 203 GPM, 75 RPM, 3-5K TQ.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/22/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	64

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 9/22/2017 06:00	Report End Date 9/23/2017 06:00	Footage (ftKB)	End Depth (ftKB) 17,488.0	Daily Field Est Total (Cost) 34,730.00	Cum Field Est To Date (Cost) 3,568,361.57
Activity WASH AND REAM @ 17,400'					

### 24hr Activity

Com
HOLE PACKING OFF. WASH AND BACK REAM F/17,278' T/17,140'. GPM 150, SPP 3050, TQ: 5200. CIRCULATE BOTTOMS UP @ 17,140' GPM 203, SPP 3800, TQ: 3200 MMRPM 106 WASH AND REAM F/17,140' T/17,294'. WOB 3/5, GPM 203, SPP 3850, TQ: 3600, RPM 35 MMRPM 106, DIFF. 50/200. HOLE PACKING OFF. WASH AND BACKREAM F/17,294' T/17,231'. CIRCULATE @17,231'. INCREASING MUD WT. F/14.8 T/15.0 PPG. GPM 158, SPP 3375, RPM 35, TQ: 3200 MMRPM 82 HOLE PACKING OFF. WASH AND BACKREAM F/17,231' T/17,140'. CIRCULATE @17,140'. INCREASING MUD WT. F/14.8 T/15.0 PPG. GPM 158, SPP 2650, RPM 35, TQ: 3200 MMRPM 82 WASH AND REAM F/17,140' T/17,400 . 154 GPM, 36 RPM, 80 MM RPM, 2,600 PSI, 3K TQ.

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 9/23/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
15.00	65

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

Daily Summary				
Report Start Date 9/23/2017 06:00	Report End Date 9/24/2017 06:00	Footage (ftKB) 567.00	End Depth (ftKB) 18,055.0	Daily Field Est Total (Cost) 34,730.00
				Cum Field Est To Date (Cost) 3,603,091.57

Activity  
CIRCULATING CLEAN UP CYCLE.

24hr Activity
Com
WASH AND REAM F/17,400' T/17,705'. GPM 160, RPM 38, MMRPM 83, PSI 2600, DIFF. 100/150, TQ. 3K SERVICE RIG, TOP DRIVE, GREASE BLOCKS. WASH AND REAM F/17,705' T/18,055'. GPM 165, RPM 38, MMRPM 86, PSI 2800, DIFF. 100/150, TQ. 3K. SLACKED OFF TO 18,065', TAGGED FISH IN HOLE @ 18,065'. CIRCULATE CLEAN CYCLE. 1ST BU CIRCULATED @ 172 GPM, 3,100 PSI, MM RPM 90, 60 RPM, 50/100 DIFF, 3K TQ. 2ND BU 193 GPM, 3,750 PSI, MM RPM 101, 75 RPM, 3K TQ. 3RD BU 201 GPM, 4,000 PSI, MM RPM 105, 85 RPM, 50/100 DIFF, 3K TQ.





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/24/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
15.00	68

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

Daily Summary					
Report Start Date 9/24/2017 06:00	Report End Date 9/25/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,055.0	Daily Field Est Total (Cost) 89,255.00	Cum Field Est To Date (Cost) 3,694,261.57
Activity TIH @ 12,053'.					

24hr Activity
Com
CIRCULATE. PERFORM CLEAN UP CYCLE. CIRCULATED @ 219 GPM, 4,630 PSI, MM RPM 114, 95 RPM, 50/150 DIFF, 3400K TQ. POOH F/18,055' T/17,504'. PUMP SLUG, CHECK FLOW. POOH F/17,504' T/12,090' {SLM}. HOLE TAKING PROPER FILL ON TRIP TANK. PULL ROT. HEAD ELEMENT, INSTALL TRIP NIPPLE. POOH F/12,090' T/SURFACE {SLM}. HOLE TAKING PROPER FILL ON TRIP TANK. FUNCTION BOP'S. L/D DIRECTIONAL TOOLS AND BIT. SERVICE RIG. C/C RIG FLOOR. P/U BIT # RR20 (6 1/8" STX-44C #5272497) AND BIT SUB. TIH T/5,404'. P/U 6" REAMER. TIH F/5,404' T/12,053. HOLE GIVING CALCULATED DISPLACEMENT. FILL EVERY 30 STD'S.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/25/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	67

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 9/25/2017 06:00	Report End Date 9/26/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,055.0	Daily Field Est Total (Cost) 25,113.00	Cum Field Est To Date (Cost) 3,719,374.57
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Activity  
RUNNING 4 1/2" LINER

### 24hr Activity

Com
TIH F/12,053' T/17,453'. { HIT TIGHT SPOT }.HOLE GIVING CALCULATED DISPLACEMENT. FILL PIPE EVERY 30 STANDS. WASH AND REAM TIGHT SPOT F/ 17,453' T/17,510'. CONTINUE TO WASH AND REAM T/18,055'. GPM 160, SPP 2025, RPM 40. PERFORM CLEAN UP CYCLE. CIRCULATE AND RECIPOCATE FULL STAND @ 18,055'. 6 1/2 BOTTOM'S UP TOTAL STROKES 33,456. GPM 250, SPP 4000, RPM 110. {SHUT DOWN RECIPOCATING PIPE BRIEFLY FOR HAIL, AND HIGH WINDS}. POOH F/18,055 T/12,053'.HOLE TAKING CALCULATED FILL OFF TRIP TANK. REMOVE ROTATING RUBBER. INSTALL TRIP NIPPLE. POOH F/ 12,053' T/SURFACE. L/D REAMER, BIT SUB AND BIT. HOLE TAKING CALCULATED FILL OFF TRIP TANK. FUNCTION BOP'S. SERVICE RIG. CLEAN OBM OFF RIG FLOOR. HELD PRE JOB SAFETY MEETING SCAN RIG CREW, BYRD CASING CREW, XTO SAFETY, AND XTO REP PRESENT. R/U CASING TOOLS. M/U SHOE TRACK. 1- DOUBLE VALVE ECCENTRIC NOSE SHOE {2.40'}, 1- 4 1/2", 13.5#, HCP-110 BTC CASING {42.44'} 1 - 4 1/2" DOUBLE VALVE FLOAT COLLAR {1.95'}, TEST FLOAT. 1 - 4 1/2", 13.5#, HCP-110 BTC CASING {42.45'}, 1 - 4 1/2" LANDING COLLAR {1.62'}, 1 - 4 1/2", 13.5# HCP-110 BTC CASING {42.45'}, 1 - 4 1/2" ALPHA TOE SLEEVE {3.64'}. TOTAL LENGTH {136.95'}.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/26/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
15.00	70

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NT Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

Daily Summary				
Report Start Date 9/26/2017 06:00	Report End Date 9/27/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,055.0	Daily Field Est Total (Cost) 62,214.23
Cum Field Est To Date (Cost) 3,781,588.80				

Activity  
CIRCULATING @ 6,984'.

24hr Activity
Com

RUN 4 1/2: CASING AS FOLLOW'S: 30 JTS. OF 4 1/2", 13.5#, HCP-110, BTC CASING { 1272.54' }, 1 - MARKER JT. { 20.98 }, 112 JTS. OF 4 1/2", 13.5#, HCP-110, BTC CASING { 4,748.60' }, 1 - MARKER JT. { 21.42 }, 13 JTS. OF 4 1/2", 13.5#, HCP-110, BTC CASING { 636.36' }, SPACER NIPPLE { 5.30' }, COMBO COLLAR { 1.15' }, CSFL LINER HANGER { 14.39' }, ZXP LINER PACKER { 23.99' }, SETTING TOOL, X-OVER DRILL PIPE { 8.50' }. RAN A TOTAL OF 160 JOINTS, 2 MARKER JNTS. { 6,836.85' }. TOTAL HANGER { 44.83' } BOTTOM DEPTH 18,055' TOP OF LINER 11,173.32'.

RIG DOWN CASING CREW.

SERVICE RIG, TOP DRIVE. CLEAN OBM OFF RIG FLOOR.

TIH F/6,890' T/9,052' WITH 4 1/2" LINER @ 2 MIN/STAND. FILLING PIPE EVERY 30 STANDS.

H2S ALARM SOUNDED. NOTIFIED SAFETY SOLUTIONS TO COME TO LOCATION TO CLEAR AREA TO RESUME WORK. SAFETY SOLUTIONS ARRIVED @ 17:00 . CHECKED ALL AREAS AND SENSORS. NO H2S PRESENT.

CIRCULATE @ 9,052' CHECKING FOR H2S FROM WELLBORE. CLEAR.

TIH F/9,052' T/12,070' WITH 4 1/2" LINER @ 2 MIN/STAND. FILLING PIPE EVERY 30 STANDS.

PULL TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT.

TIH F/12,070' T/12,508' WITH 4 1/2" LINER @ 2 MIN/STAND. FILLING PIPE EVERY 30 STANDS.

WASH F/12,508' T/12,531'. 83 GPM, 625 PSI.

TIH F/12,531' T/12,560' WITH 4 1/2" LINER @ 2 MIN/STAND. FILLING PIPE EVERY 30 STANDS.

ATTEMPT TO WASH AND REAM F/12,560' T/12,624'. 83 - 168 GPM, 650 - 2,175 PSI, 15 - 45 RPM, 1 - 4K TQ, 0 - 40K WOB. TRIED WITH NO ROTARTY AND PUMPING ALSO. WITH NO SUCCESS.

DECISION MADE TO L/D CASING. POOH F/12,624' T/11,712'. NO OVER PULL. HOLE TAKING PROPER FILL.

REMOVE ROTATING RUBBER. INSTALL TRIP NIPPLE.

POOH F/11,712' T/6,984'. 1.5 MIN. A STAND. HOLE TAKING PROPER FILL

CIRCULATE @ 78 GPM. WAITING ON ORDERS.

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 9/27/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

**Daily Summary**

Report Start Date 9/27/2017 06:00	Report End Date 9/28/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,055.0	Daily Field Est Total (Cost) 46,225.00	Cum Field Est To Date (Cost) 3,827,813.80
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Activity  
POOH @ 16500'**24hr Activity**

Com
CIRCULATE. CHECK FLOW (STATIC). PUMP SLUG PRE JOB SAFETY MEETING. R/U CASING TOOLS. POOH. L/D HANGER, 4 1/2" CASING AND SHOE TRACK. HOLE TAKING CALCULATED FILL. FUNCTION BOP'S. PRE JOB SAFETY MEETING. R/D CASING TOOLS. SERVICE RIG. M/U BIT 6 1/8" STX-44C #5272497 RR #20, BIT SUB. TIH T/12,053'. FILL EVERY 30 STANDS. HOLE GIVING CALCULATED DISPLACEMENT. REMOVE TRIP NIPPLE. INSTALL ROTATING RUBBER. TIH F/12,053' T/12,623'. TAGGED @ SAME SPOT AS LINER. WORKED PIPE, WOULD NOT GO. PULL BACK UP T/12,502'. WORKED PIPE. GO IT TO GO INTO SIDE TRACK #2 (ORIGINAL LATERAL) TIH F/12,502' T/17,524' TIGHT HOLE. WASH AND REAM F/17,524' T/18,055'. 200 GPM, 3,100 PSI, 60 RPM, 3-4K TQ. (TAGGED FISH @ 18,065'. PULL BACK T/18,055'. CIRCULATE BOTTOMS UP X2. 230 GPM, 3,750 PSI, 100 RPM, 3K TQ. POOH F/18055' T/17,400'. CHECK FLOW (STATIC). PUMP SLUG. POOH F/17,400' T/16500' HOLE TAKING PROPER FILL.

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 9/28/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

**Daily Summary**

Report Start Date 9/28/2017 06:00	Report End Date 9/29/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 12,502.0	Daily Field Est Total (Cost) 28,808.00	Cum Field Est To Date (Cost) 3,856,621.80
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Activity  
POOH @ 9,400'.

**24hr Activity**

Com
POOH F/ 16203' TO 12502'
WORKED PIPE F/ 12502' TO 12623' ATTEMPTING TO GET IN TO SIDE TRACK #2 ( FAILED )
PULLED ROTATING HEAD RUBBER AND POOH TO 11966'
CIRC AT SHOE WHILE WAITING FOR X-OVER TO BE BUILT AND CUT DRILL LINE
SERVICE RIG
PUMPED SLUG AND POOH TO 10460'
DRILL LINE CROSSED ON DRUM HAD TO CUT 15' AND RESPOOL
POOH TO 9650'
DRILL LINE JUMPED WRAP AGAIN ( 2ND WRAP ON DRUM SAME AS LAST TIME ) UNSPOOLED LINE HOLDING TENSION WITH DRILL LINE SPOOL TO AVOID POSSIBLE DAMAGE AGAIN
POOH F/9,650' T/SURFACE. HOLE TAKING CALCULATED FILL. FUNCTION BOP.
PRE JOB SAFETY MEETING: R/U CASING TOOLS.
M/U CASING SHOE TRACK: SHOE, 5' PUB JT, CASING JT AND X-OVER.
R/D CASING TOOLS.
TIH F/SURFACE T/12,502'. HOLE GIVING CALCULATED DISPLACEMENT. FILL EVERY 30 STANDS.
TRIED TO GET IN SIDE TRACK 2 @ 12,502' (UNSUCCESSFUL). KEPT GOING IN SIDE TRACK 3. TAGGED @ 12,623'.
CHECK FLOW (STATIC). PUMP SLUG. POOH F/12,623' T/9,400'.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/29/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
14.95	68

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

Daily Summary					
Report Start Date	Report End Date	Footage (ftKB)	End Depth (ftKB)	Daily Field Est Total (Cost)	Cum Field Est To Date (Cost)
9/29/2017 06:00	9/30/2017 06:00	0.00	18,055.0	29,893.00	3,886,514.80
Activity					
POOH @ 12600'					

24hr Activity
Com
POOH WAIT ON TONG OPERATOR SERVICE RIG R/U BYRD CASING TONGS AND BROKE OUT CASING SHOE,PUP JT., AND X-OVER. BENT JT. OF CASING EQUIVLENT TO A 2.38 MUD MTR. WITH A 6' BIT TO BEND P/U SAME AND M/U SHOE AND X-OVER R/D BYRD CASING TONGS TIH W/ CASING ON DRILL PIPE T/12,040'. FILL EVERY 30 STANDS. HOLE GIVING CORRECT DISPLACEMENT. REMOVE TRIP NIPPLE. INSTALL ROT. ELEMENT. TIH F/12,040' T/12,502'. WORK PIPE UNTIL WE GOT INTO SIDE TRACK 2. TIH F/12,502' T/17,377'. TIGHT HOLE. HOLE GIVING CORRECT FILL. FILL EVERY 30 STANDS. WASH AND REAM F/17,377' T/17,468'.175 GPM, 2,150 PSI, 15 RPM, 2-3K TQ. MW IN 15.1, MW OUT 15.0 PPG. TIH F/17,468' T/18,065', TAGGED FISH. CIRCULATE HOLE CLEAN. CHECK FLOW (STATIC). PUMP SLUG. POOH F/18,065' T/ 12600' . HOLE TAKING CORRECT FILL.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 9/30/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date 9/17/2017	Description SIDETRACK #4	EW Tie In (ft) -127.19	NS Tie In (ft) -363.54	Azimuth Tie In (°) 204.9	Inclination Tie In (°) 79.2	MD Tie In (ftKB) 12,220.00	TVD Tie In (ftKB) 11,945.60
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 9/30/2017 06:00	Report End Date 10/1/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 18,055.0	Daily Field Est Total (Cost) 28,151.00	Cum Field Est To Date (Cost) 3,909,333.80
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Activity  
ATTEMPTING TO GET INTO SIDE TRACK #2.

### 24hr Activity

Com
POOH F/12,600' T/12,040'. HOLE TAKING CORRECT FILL. REMOVE ROT. ELEMENT. INSTALL TRIP NIPPLE. POOH F/12,040' T/SURFACE. HOLE TAKING CORRECT FILL. HELD PJSM R/U CASING TOOLS. HELD PJSM & RUN 4 1/2" LINER. AS FOLLOWS: 4 1/2" 1-FLOAT SHOE (1.60'), 1-JT 4 1/2" P-110 13.50# BTC (42.47'), 1-DV FLOAT COLLAR (1.95'), 1-Jt 4 1/2" P-110 13.50# BTC (42.44'), 1-ALPHA LANDING COLLAR (1.62'), 1-Jt 4 1/2" P-110 13.50# BTC (42.38'), 1-ALPHA SLEEVE (3.64'), 29-Jts 4 1/2" P-110 13.50# BTC (1229.95'), 1-MARKER Jt (20.98'), 115-Jts 4 1/2" P-110 13.50# BTC (4831.36'), 1-MARKER Jt.(21.42'), 14-Jts 4 1/2" P-110 13.50# BTC (593.90'), 1 -SPACER NIPPLE (5.30'), 1-COMBO COLLAR (1.15'), LINER HANGER (14.39'), 1-LINER TOP PACKER (23.99'), 1- PUBJt (8.50') RIH W/4" DRILL PIPE T/12,030'. REMOVE TRIP NIPPLE. INSTALL ROTATING ELEMENT. RIH W/4" DRILL PIPE F/12,030' T/12,502'. HOLE GIVING CORRECT DISPLACEMENT. ATTEMPTING TO GET INTO SIDE TRACK #2.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/2/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	80

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
12,758.00	89.30	170.90	11,981.08	-889.05	-147.33	843.60	3.57
12,853.00	89.20	170.10	11,982.32	-982.73	-131.66	938.55	0.85
12,947.00	88.10	167.60	11,984.54	-1,074.93	-113.49	1,032.52	2.90
13,042.00	88.30	158.50	11,987.53	-1,165.66	-85.83	1,126.89	9.58
13,136.00	90.00	158.60	11,988.92	-1,253.13	-51.46	1,219.37	1.81

### Daily Summary

Report Start Date 10/2/2017 06:00	Report End Date 10/3/2017 06:00	Footage (ftKB) 635.00	End Depth (ftKB) 13,255.0	Daily Field Est Total (Cost) 30,717.39	Cum Field Est To Date (Cost) 3,985,057.19
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Activity  
DRILLING LATERAL @ 13,255'.

### 24hr Activity

Com
TIH F/ 8572' TO 12150' FILLING DRILL PIPE EVERY 30 STDs. INSTALL ROTATING HEAD RUBBER ATTEMPTED TO ORIENT TOOL FACE TO 180 ( WOULD NOT STAY THERE ) TIH TO 12620' WITH TOOL FACE @ 90 SLIDE F/ 12620' TO 12630' WOB-25, SPM-80, PSI-4400, DIFF-300, GPM-243, TF-90L ROTATE F/ 12630' TO 12652' WOB-20, RPM-65, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-243 SLIDE F/ 12652' TO 12662' WOB-25, SPM-80, PSI-4400, DIFF-300, GPM-243, TF-90L ROTATE F/ 12662' TO 12683' WOB-20, RPM-65, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-243 SLIDE F/ 12683' TO 12691' WOB-25, SPM-80, PSI-4400, DIFF-300, GPM-243, TF-90L ROTATE F/ 12691' TO 12715' WOB-20, RPM-65, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-243 SLIDE F/ 12715' TO 12730' WOB-25, SPM-80, PSI-4600, DIFF-300, GPM-243, TF-90L ROTATE F/ 12730' TO 12769' WOB-20, RPM-65, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-243 H2S MONITOR ALARM. WAITED ON SAFETY SOLUTIONS TO GIVE ALL CLEAR. ROTATE F/12769' T/12,914' WOB-20, RPM-70, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-232 SLIDE F/ 12914' TO 12929' WOB-25, SPM-78, PSI-4150, DIFF-150, GPM-230, TF-150L ROTATE F/12929' T/13009' WOB-25, RPM-70, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-232 SLIDE F/ 13009' TO 13024' WOB-15, SPM-78, PSI-4150, DIFF-150, GPM-230, TF-75L ROTATE F/13024' T/13103' WOB-25, RPM-70, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-232 SLIDE F/ 13103' TO 13113' WOB-20K, SPM-78, PSI-4325, DIFF-250, GPM-230, TF-75R ROTATE F/13113' T/13197' WOB-25, RPM-70, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-232 SLIDE F/ 13197' TO 13220' WOB-20K, SPM-78, PSI-4325, DIFF-250, GPM-232, TF-90R ROTATE F/13220' T/13255' WOB-25, RPM-70, SPM-80, PSI-4600, DIFF-350, TQ.-4K, GPM-232





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/3/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	62

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
13,983.00	90.80	166.20	11,983.81	-2,060.70	202.67	2,042.98	3.44
14,077.00	87.50	164.60	11,985.20	-2,151.64	226.36	2,136.95	3.90
14,171.00	86.80	162.50	11,989.88	-2,241.67	252.94	2,230.80	2.35
14,265.00	89.00	164.10	11,993.32	-2,331.64	279.93	2,324.68	2.89
14,316.00	89.00	164.10	11,994.21	-2,380.68	293.90	2,375.67	0.00

### Daily Summary

Report Start Date 10/3/2017 06:00	Report End Date 10/4/2017 06:00	Footage (ftKB) 1,150.00	End Depth (ftKB) 14,405.0	Daily Field Est Total (Cost) 50,064.90	Cum Field Est To Date (Cost) 4,035,122.09
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Activity  
DRILLING LATERAL @ 14,405'.

### 24hr Activity

Com
ROTATE F/ 13255' TO 13301' WOB-23, ROP-75, SPM-80, PSI-4600, DIFF-475, GPM-232
SLIDE F/ 13301' TO 13316' WOB-30, ROP-30, SPM-80, 4450, DIFF-100, GPM-232, TF-120R
ROTATE F/ 13316' TO 13396' WOB-23, ROP-125, SPM-80, PSI-4560, DIFF-300, GPM-232
SLIDE F/ 13396' TO 13411' WOB-25, ROP-20, SPM-80, PSI- 4300, DIFF-150, GPM-232, TF-172R
ROTATE F/ 13411' TO 13678' WOB-23, ROP-150, SPM-80, PSI-4600, DIFF-500, GPM-232
SLIDE F/ 13678' TO 13695' WOB-25, ROP-40, SPM-80, PSI- 4450, DIFF-110, GPM-232, TF-140R
ROTATE F/ 13695' TO 13752' WOB-23, ROP-75, SPM #1- 66, PSI-4550, DIFF-300, GPM-232
SERVICING RIG AND TOP DRIVE
INSTALL NEW QUICK CHANGE PISTON ROD ASSEMBLY IN #1 MP WHILE CHANGING WEAR PLATE IN #2 MP.
ROTATE F/ 13752' TO 13,767 WOB-23, ROP-60, SPM #1- 66, PSI-4650, DIFF-210, GPM-232
SLIDE F/ 13767' TO 13787' WOB-25, ROP-20, SPM-65, PSI- 4450, DIFF-100, GPM-225, TF-110R
ROTATE F/ 13787' TO 14,049' WOB-20, ROP-66, SPM #1- 66, PSI-4550, DIFF-210, GPM-225
SLIDE F/ 14,049' TO 14,064' WOB-20, ROP-15, SPM-78, PSI- 4325, DIFF-100, GPM-225, TF-150L
ROTATE F/ 14,064' TO 14,236' WOB-20, ROP-86, SPM #1- 70, PSI-4325, DIFF-210, GPM-230 TQ-5K
SLIDE F/ 14,236' TO 14,251' WOB-12, ROP-10, SPM-78, PSI- 4325, DIFF-100, GPM-225, TF-40R
ROTATE F/ 14,251' TO 14,405' WOB-22, ROP-62, RPM-70, SPM #2- 78, PSI-4325, DIFF-320, GPM-230 TQ-5K



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/4/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	62

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
15,206.00	91.90	165.30	11,969.08	-3,236.03	537.03	3,262.86	0.48
15,332.00	89.20	164.10	11,967.87	-3,357.54	570.28	3,388.84	2.34
15,394.00	88.00	163.60	11,969.39	-3,417.08	587.52	3,450.82	2.10
15,489.00	87.80	164.30	11,972.87	-3,508.31	613.76	3,545.74	0.77
15,540.00	87.80	164.30	11,974.83	-3,557.37	627.55	3,596.71	0.00

### Daily Summary

Report Start Date 10/4/2017 06:00	Report End Date 10/5/2017 06:00	Footage (ftKB) 1,155.00	End Depth (ftKB) 15,560.0	Daily Field Est Total (Cost) 34,559.00	Cum Field Est To Date (Cost) 4,168,445.79
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Activity  
DRILL LATERAL @ 15,560'

### 24hr Activity

Com
ROTATE FROM 14,405' TO 14,430' WOB-23, ROP-65, SPM -80, PSI-4,950, GPM-230
SLIDE FROM 14,430' TO 14,445' WOB-15, ROP-50, SPM -80, PSI-4,630, GPM-230, DIFF- 20 TF-32R
ROTATE FROM 14,445' TO 14,806' WOB-23, ROP-60, SPM -80, PSI-4,950, DIFF-450, GPM-230
SLIDE FROM 14,806' TO 14,825' WOB-20, ROP-60, SPM -80, PSI-4,700, GPM-230, DIFF- 20 TF-70R
ROTATE FROM 14,825' TO 14,975' WOB-23, ROP-75, SPM -80, PSI-4,950, DIFF-500, GPM-230
SERVICE RIG AND TOP DRIVE
ROTATE FROM 14,975' TO 15,089' WOB-23, ROP-100, SPM -80, PSI-5,050, DIFF-500, GPM-230
SLIDE FROM 15,089' TO 15,099' WOB-20, ROP-20, SPM -78, PSI-4,500, GPM-230, DIFF- 20 TF-170R
ROTATE FROM 15,099' TO 15,178' WOB-25, ROP-40, ROT-70, SPM -78, PSI-4,500, DIFF-450, GPM-230, TQ-6K
SLIDE FROM 15,178' TO 15,193' WOB-25, ROP-, SPM -68, PSI-5,230, GPM-240, DIFF- 100 TF-150L
ROTATE FROM 15,193' TO 15,272' WOB-20, ROP-56, ROT-70, #1 MP SPM -68, PSI-5,230, DIFF-250, GPM-240, TQ-6K
SLIDE FROM 15,272' TO 15,287' WOB-25, ROP-12, SPM -81, PSI-4,900, GPM-240, DIFF- 100 TF-150L
ROTATE FROM 15,287' TO 15,560' WOB-24, ROP-, ROT-70, SPM -78, PSI-4,750, DIFF-420, GPM-230, TQ-6K



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/5/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	86

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
15,772.00	90.40	165.10	11,979.45	-3,778.75	696.62	3,825.43	5.32
15,866.00	90.20	162.10	11,978.95	-3,868.92	723.15	3,919.41	3.20
15,960.00	89.50	158.50	11,979.20	-3,957.40	754.84	4,013.18	3.90
16,054.00	89.80	159.00	11,979.77	-4,045.01	788.90	4,106.76	0.62
16,105.00	89.80	159.00	11,979.95	-4,092.62	807.18	4,157.55	0.00

### Daily Summary

Report Start Date 10/5/2017 06:00	Report End Date 10/6/2017 06:00	Footage (ftKB) 639.00	End Depth (ftKB) 16,199.0	Daily Field Est Total (Cost) 37,417.00	Cum Field Est To Date (Cost) 4,205,862.79
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Activity  
DRILL LATERAL @ 16,199.0

### 24hr Activity

Com
SLIDE F/ 15,560' TO 15575' WOB-30, ROP-20, SPM-78, PSI-4520, DIFF-20, GPM-230, TF-25L
ROTATE F/ 15575' TO 15649' WOB-25, ROP-40, SPM-78, PSI-4900, DIFF-400, GPM-230
SLIDE F/ 15,649' TO 15659' WOB-25, ROP-10, SPM-78, PSI-4620, DIFF-20, GPM-230, TF-HS
ROTATE F/ 15659' TO 15743' WOB-25, ROP-75, SPM-78, PSI-4950, DIFF-400, GPM-230
SLIDE F/ 15,743' TO 15,758' WOB-25, ROP-10, SPM-78, PSI-4620, DIFF-20, GPM-230, TF-HS
ROTATE F/ 15,758' TO 15,823' WOB-22, ROP-65, ROT-70, SPM-68, PSI-5,000, DIFF-200, GPM-230, TQ-7K
SERVICE TOP DRIVE
ROTATE F/ 15,823' TO 15,838' WOB-24, ROP-30, ROT-70, SPM-78, PSI-4,540, DIFF-500, GPM-225, TQ-7K
SLIDE F/ 15,838' TO 15,852' WOB-25, ROP-8, SPM-78, PSI-4540, DIFF-100, GPM-230, TF-80L
ROTATE F/ 15,852' TO 15,932' WOB-25, ROP-53, ROT-70, SPM-78, PSI-4,540, DIFF-500, GPM-225, TQ-7K
SLIDE F/ 15,932' TO 15,942' WOB-25, ROP-8, SPM-78, PSI-4540, DIFF-100, GPM-230, TF-90L
ROTATE F/ 15,942' TO 16,199' WOB-25, ROP-53, ROT-70, SPM-78, PSI-4,540, DIFF-500, GPM-225, TQ-7K



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/6/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
14.80	68

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 10/2/2017	Description SIDETRACK #3	EW Tie In (ft) -173.71	NS Tie In (ft) -634.67	Azimuth Tie In (°) 169.9	Inclination Tie In (°) 86.9	MD Tie In (ftKB) 12,502.00	TVD Tie In (ftKB) 11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
16,431.00	90.80	159.30	11,980.92	-4,395.17	928.33	4,477.05	0.65
16,526.00	91.30	160.00	11,979.18	-4,484.22	961.37	4,571.84	0.91
16,620.00	90.90	161.10	11,977.37	-4,572.84	992.66	4,665.70	1.24
16,714.00	90.00	159.20	11,976.64	-4,661.25	1,024.58	4,759.55	2.24
16,765.00	90.00	159.20	11,976.64	-4,708.93	1,042.69	4,810.41	0.00

Daily Summary			
Report Start Date 10/6/2017 06:00	Report End Date 10/7/2017 06:00	Footage (ftKB) 589.00	End Depth (ftKB) 16,788.0
Activity DRILL LATERAL @ 16,788.0		Daily Field Est Total (Cost) 36,878.00	Cum Field Est To Date (Cost) 4,242,740.79

24hr Activity
Com
ROTATE F/ 16199' TO 16219' WOB-25, ROP-60, SPM-80, PSI-5200, DIFF-370, GPM-230
SLIDE F/ 16219' TO 16235' WOB-30, ROP-10, SPM-80, PSI-4700, DIFF-20, GPM-230, TF-30L
ROTATE F/ 16235' TO 16295' WOB-25, ROP-60, SPM-80, PSI-5200, DIFF-370, GPM-230
SLIDE F/ 16295' TO 16305' WOB-30, ROP-15, SPM-80, PSI-4700, DIFF-20, GPM-230, TF-30L
ROTATE F/ 16305' TO 16388' WOB-25, ROP-70, SPM-80, PSI-5200, DIFF-450, GPM-230
SERVICE RIG AND TOP DRIVE
ROTATE F/ 16,388' TO 16,512' WOB-25, ROP-60, ROT-85, SPM-78, PSI-4500, DIFF-500, GPM-225, TQ-7K
SLIDE F/ 16502' TO 16512' WOB-25, ROP-, SPM-78, PSI-4500, DIFF-50, GPM-230, TF-45RL
ROTATE F/ 16,512' TO 16,691' WOB-25, ROP-60, ROT-85, SPM-78, PSI-4500, DIFF-500, GPM-225, TQ-7K
SLIDE F/ 16,691' TO 17,701' WOB-25, ROP-5, SPM-78, PSI-4400, DIFF-50, GPM-230, TF-30R
ROTATE F/ 16,701' TO 16,684' WOB-22, ROP-56, ROT-85, SPM-78, PSI-4500, DIFF-450, GPM-225, TQ-7K
SLIDE F/ 16,785' TO 16,788' WOB-25, ROP-5, SPM-78, PSI-4400, DIFF-50, GPM-230, TF-30R



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/7/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
16,431.00	90.80	159.30	11,980.92	-4,395.17	928.33	4,477.05	0.65
16,526.00	91.30	160.00	11,979.18	-4,484.22	961.37	4,571.84	0.91
16,620.00	90.90	161.10	11,977.37	-4,572.84	992.66	4,665.70	1.24
16,714.00	90.00	159.20	11,976.64	-4,661.25	1,024.58	4,759.55	2.24
16,765.00	90.00	159.20	11,976.64	-4,708.93	1,042.69	4,810.41	0.00

### Daily Summary

Report Start Date 10/7/2017 06:00	Report End Date 10/8/2017 06:00	Footage (ftKB) 8.00	End Depth (ftKB) 16,796.0	Daily Field Est Total (Cost) 93,624.40	Cum Field Est To Date (Cost) 4,336,365.19
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Activity  
TIH TO 16,000'.

### 24hr Activity

Com

SLIDE F/ 16788' TO 16796' WOB-30, ROP-5, SPM-78, PSI-4400, DIFF-15, GPM-230, TF-30R

CIRC AND BUILD AND PUMP SLUG

POOH TO 12090'

PULLED ROTATING HEAD RUBBER AND INSTALL TRIP NIPPLE

POOH TO BHA

DRAIN MOTOR, BROKE BIT, REMOVED MWD, L/D MOTOR

M/U NEW MOTOR, SCRIBE, INSTALL MWD, SHALLOW TEST AND M/U BIT

SERVICE RIG AND TOP DRIVE

C/O BURN SUB

TIH TO 2,700'

L/D JT OF PIPE. SCREEN WOULD COME OUT.

TIH TO 3,074'

P/U AGITATOR AND TEST SAME.

TIH TO 12,090'

REMOVE TRIP NIPPLE AND INSTALL ROTATING HEAD.

HELD PJSM. SLIP AND CUT 121' DRILL LINE.

TIH TO 12,560'. ORIENTATE TOOL THROUGH SIDE TRACK. CONTINUE TIH.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/8/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	71

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
16,925.00	92.30	159.70	11,972.89	-4,857.87	1,100.99	4,968.01	2.17
17,019.00	93.70	161.40	11,967.97	-4,946.38	1,132.24	5,061.78	2.34
17,113.00	93.00	161.60	11,962.48	-5,035.37	1,162.02	5,155.59	0.77
17,207.00	94.00	162.10	11,956.74	-5,124.52	1,191.25	5,249.39	1.19
17,257.00	94.00	162.10	11,953.25	-5,171.99	1,206.58	5,299.26	0.00

### Daily Summary

Report Start Date 10/8/2017 06:00	Report End Date 10/9/2017 06:00	Footage (ftKB) 491.00	End Depth (ftKB) 17,287.0	Daily Field Est Total (Cost) 31,823.00	Cum Field Est To Date (Cost) 4,368,188.19
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Activity  
DRILL LATERAL @ 17,287.0

### 24hr Activity

Com
WASH AND REAM F/ 16598' TO 16796'
SLIDE F/ 16796' TO 16808' WOB-10, ROP-50, SPM-80, PSI-5050, DIFF-20, TF-30R
ROTATE F/ 16808' TO 16900' WOB-25, ROP-50, SPM-80, PSI-5275, DIFF-350, GPM-230
SLIDE F/ 16900' TO 16915' WOB-20, ROP-30, SPM-80, PSI-5230, DIFF-20, TF-70R
ROTATE F/ 16915' TO 16995' WOB-25, ROP-70, SPM-80, PSI-5350, DIFF-275, GPM-230
SLIDE F/ 16995' TO 17015' WOB-20, ROP-15, SPM-80, PSI-5050, DIFF-40, TF-90R
ROTATE F/ 17015' TO 17069' WOB-25, ROP-60, SPM-80, PSI-5350, DIFF-320, GPM-230
SERVICE RIG AND CHANGE SAVER SUB
ROTATE F/ 17069' TO 17089' WOB-25, ROP-75, SPM-80, PSI-5450, DIFF-420, GPM-230
SLIDE F/ 17,089' TO 17,109' WOB-20, ROP-7, SPM-78, PSI-4800, DIFF-20, T/F-60R
ROTATE F/ 17109' TO 17183' WOB-22, ROP-49, SPM-78, PSI-4800, DIFF-300, GPM-220, TQ-8K
SLIDE F/ 17,183' TO 17,193' WOB-20, ROP-5, SPM-78, PSI-4800, DIFF-20, GPM-225, T/F-60R
ROTATE F/ 17183' TO 17200' WOB-23, ROP-15, ROT-80, SPM-78, PSI-4800, DIFF-320, GPM-225, TQ-8K
SLIDE F/ 17,200' TO 17,215' WOB-25, ROP-7, SPM-78, PSI-4800, DIFF-20, GPM-225, T/F-60R
ROTATE F/ 17215' TO 17277' WOB-23, ROP-31, ROT-80, SPM-78, PSI-4800, DIFF-300, GPM-225, TQ-8K
SLIDE F/ 17,277' TO 17,287' WOB-25, ROP-8, SPM-78, PSI-4800, DIFF-20, GPM-225, T/F-120R



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/9/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	65

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,301.00	93.20	164.30	11,950.49	-5,214.02	1,219.27	5,343.41	5.31
17,396.00	93.80	164.60	11,944.69	-5,305.37	1,244.69	5,438.21	0.71
17,490.00	92.20	164.40	11,939.77	-5,395.83	1,269.77	5,532.05	1.72
17,584.00	91.60	161.80	11,936.65	-5,485.71	1,297.08	5,625.99	2.84
17,634.00	91.60	161.80	11,935.25	-5,533.19	1,312.69	5,675.96	0.00

### Daily Summary

Report Start Date 10/9/2017 06:00	Report End Date 10/10/2017 06:00	Footage (ftKB) 442.00	End Depth (ftKB) 17,729.0	Daily Field Est Total (Cost) 35,432.00	Cum Field Est To Date (Cost) 4,403,620.19
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Activity  
DRILL LATERAL @ 17,729.0

### 24hr Activity

Com
SLIDE F/ 17287' TO 17289' WOB-20, ROP-2, SPM-80, PSI-4770, DIFF-10, GPM-230, TF-130R
ROTATE F/ 17289' TO 17466' WOB-25, ROP-75, SPM-80, PSI-5400, DIFF-475, GPM-230
SLIDE F/ 17,466' TO 17,476' WOB-22, ROP-2, SPM-80, PSI-4775, DIFF-30, GPM-230, TF-140R
ROTATE F/ 17,476' TO 17,540' WOB-25, ROP-60, SPM-80, PSI-5300, DIFF-500, GPM-230
SERVICE RIG AND TOP DRIVE
ROTATE F/ 17,540' TO 17,560' WOB-25, ROP-20, SPM-78, PSI-4800, DIFF-500, GPM-225, TQ-8K
SLIDE F/ 17,560' TO 17,575' WOB-22, ROP-5, SPM-78, PSI-4800, DIFF-50, GPM-225, TF-105L
ROTATE F/ 17,575' TO 17,655' WOB-25, ROP-32, SPM-65 MP#1, PSI-5100, DIFF-320, GPM-225, TQ-8K
SLIDE F/ 17,655' TO 17,667' WOB-22, ROP-5, SPM-78, PSI-4800, DIFF-50, GPM-225, TF-105L
ROTATE F/ 17,667' TO 17,678' WOB-25, ROP-32, SPM-65 MP#1, PSI-5100, DIFF-320, GPM-225, TQ-8K
REPLACE WASHOUTED OUT STANDPIPE UNION
ROTATE F/ 17,678' TO 17,729' WOB-25, ROP-51, SPM-78 MP#2, PSI-4800, DIFF-400, GPM-225, TQ-8K



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/10/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	65

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,584.00	91.60	161.80	11,936.65	-5,485.71	1,297.08	5,626.16	2.84
17,679.00	90.60	162.30	11,934.83	-5,576.07	1,326.35	5,721.13	1.18
17,773.00	92.20	164.30	11,932.53	-5,666.07	1,353.36	5,815.09	2.72
17,868.00	93.10	164.30	11,928.14	-5,757.43	1,379.04	5,909.97	0.95
17,918.00	93.10	164.30	11,925.43	-5,805.49	1,392.55	5,959.89	0.00

### Daily Summary

Report Start Date 10/10/2017 06:00	Report End Date 10/11/2017 06:00	Footage (ftKB) 189.00	End Depth (ftKB) 17,918.0	Daily Field Est Total (Cost) 57,500.35	Cum Field Est To Date (Cost) 4,461,672.54
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Activity  
TIH @ 186.0

### 24hr Activity

Com
ROTATE F/ 17729' TO 17749' WOB-25, ROP-25, SPM-80, PSI-5350, DIFF-420, GPM-230
SLIDE F/ 17749' TO 17759' WOB-25, ROP-2, SPM-80, PSI-4820, DIFF-10, GPM-230, TF-40R
ROTATE F/ 17759' TO 17918' WOB-25, ROP-25, SPM-80, PSI-5350, DIFF-420, GPM-230
SERVICE RIG AND TOP DRIVE
CIRCULATE WHILE REDRESSING POP-OFF ON #1 MUD PUMP
CIRCULATE AND BUILD SLIG
TOOH TO 12,090' PULL ROTATING HEAD AND INSTALL TRIP NIPPLE, TOOH TO BIT, L/D MUD MOTOR & BIT #27.
M/U BIT #28, MUD MOTOR (QES500037) AND TIH TO 185'.
REPLACE 5 1/2" LINERS IN #2 MUD PUMP WITH 4 3/4" CERAMIC LINERS.





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/11/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	76

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
17,773.00	92.20	164.30	11,932.53	-5,666.07	1,353.36	5,815.20	2.72
17,868.00	93.10	164.30	11,928.14	-5,757.43	1,379.04	5,910.08	0.95
17,918.00	93.10	164.30	11,925.43	-5,805.49	1,392.55	5,960.00	0.00
17,962.00	93.40	163.40	11,922.94	-5,847.69	1,404.76	6,003.92	2.15
18,056.00	92.80	164.40	11,917.86	-5,937.87	1,430.79	6,097.78	1.24

### Daily Summary

Report Start Date 10/11/2017 06:00	Report End Date 10/12/2017 06:00	Footage (ftKB) 209.00	End Depth (ftKB) 18,127.0	Daily Field Est Total (Cost) 46,841.30	Cum Field Est To Date (Cost) 4,508,513.84
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Activity  
DRILL LATERAL @ 18,126 '

### 24hr Activity

Com
CHANGE OUT LINER'S IN #1 MUD PUMP FROM 5 1/2" TO 4 3/4". INSTALL 7000 PSI POP OFF PIN. TEST PUMP TO 2500 PSI {OK} CLEAN OBM OFF RIG FLOOR. TIH F/186' T/2,760'. TEST PSI BEFORE AGITATOR @ 250 GPM, 95 SPM - 2,400, P/U AGITATOR, TEST PSI AFTER 3,050. HOLE GIVING CALCULATED DISPLACEMENT. TIH F/2,760' T/5,774'. HOLE GIVING CALCULATED DISPLACEMENT. FILL PIPE EVERY 30 STANDS. SERVICE RIG AND TOP DRIVE. CHANGE DIES ON ST-80. TIH F/5,774' T/9,500". HOLE GIVING CALCULATED DISPLACEMENT. FILL PIPE EVERY 30 STANDS. POWER WRENCH BLEW HOSE ON ST-80 WHILE CLAMPED ON PIPE. TIH F/9,500' T/12,090'. HOLE GIVING CALCULATED DISPLACEMENT. FILL PIPE EVERY 30 STANDS. REMOVE TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT. TIH F/12,090' TO 17,824'. REAM 17,824' TO 17,918'. ROTATE F/17,918' TO 18,126' WOB- 20, ROP-52, ROT-80, MM-RPM-125, #1 MP- SPM-92, PSI-5700, DIFF-320, GPM-240, TQ-8K SLIDE DRILL F/18,126' TO 18,127' WOB- 20, ROP- , MM-RPM-125, #1 MP- SPM-92, PSI-5700, DIFF-20, GPM-240, T/F-120L



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/12/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	68

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
18,151.00	92.10	165.50	11,913.79	-6,029.52	1,455.44	6,192.27	1.37
18,245.00	91.60	162.10	11,910.76	-6,119.73	1,481.65	6,286.20	3.65
18,339.00	91.00	161.30	11,908.63	-6,208.95	1,511.15	6,380.14	1.06
18,433.00	90.70	161.10	11,907.23	-6,297.93	1,541.44	6,474.08	0.38
18,527.00	89.80	159.50	11,906.82	-6,386.42	1,573.13	6,567.96	1.95

### Daily Summary

Report Start Date 10/12/2017 06:00	Report End Date 10/13/2017 06:00	Footage (ftKB) 470.00	End Depth (ftKB) 18,597.0	Daily Field Est Total (Cost) 49,387.20	Cum Field Est To Date (Cost) 4,558,195.96
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Activity  
DRILL LATERAL @ 18,597.0

### 24hr Activity

Com
SLIDE F/ 18,127' TO 18,145' 18' @ 5.1 FT/HR WOB 22, SPM 90, SPP 5590, DIFF-100, GPM-242, MMRPM 123, TF-120L ROTATE F/18,145' T/18,221'. 76' @ 38 FT/HR WOB 22, SPM 96, SPP 6150, DIFF-350, GPM-252, RPM 85, TQ: 9240, MMRPM 131. SLIDE F/ 18,221' TO 18,241' 20' @ 5.7 FT/HR WOB 22, SPM 96, SPP 5980, DIFF-180, GPM-252, MMRPM 131, TF-90L ROTATE F/18,241' T/18,295'. 54' @ 54 FT/HR WOB 24, SPM 96, SPP 6150, DIFF-350, GPM-252, RPM 85, TQ: 9240, MMRPM 131. SERVICE RIG AND TOP DRIVE. RE-CYCLE PUMPS. ROTATE F/18,295' T/18,315'. 20' @ 20 FT/HR WOB 24, SPM 48/48, SPP 6250, DIFF-250, GPM-252, RPM 85, TQ: 9240, MMRPM 131.  RE-CYCLE PUMPS SLIDE F/ 18,315" TO 18,334" 19' @ 4.75 FT/HR WOB 20, SPM 96, SPP 5950, DIFF-130, GPM-252, MMRPM 131, TF-90L CHANGE OUT CANRIG TRANSDUCERF/6K TO 10K. ROTATE F/18,334' T/18,409'. 65' @ 32.5 FT/HR WOB 24, SPM 95, SPP 5900, DIFF-450, GPM-252, RPM 80, TQ: 9240, MMRPM 131. SLIDE F/ 18,409" TO 18,424" 15' @ 7.5 FT/HR WOB 20, SPM 95, SPP 5900, DIFF-130, GPM-252, MMRPM 131, TF-90L ROTATE F/18,424' T/18,597'. 173' @ 43.25 FT/HR WOB 24, SPM 95, SPP 5900, DIFF-450, GPM-252, RPM 80, TQ: 9240, MMRPM 131.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/13/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	65

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
18,715.00	93.10	162.90	11,903.29	-6,563.98	1,634.62	6,754.27	3.54
18,810.00	91.90	160.70	11,899.15	-6,654.14	1,664.26	6,849.16	2.64
18,905.00	91.70	159.70	11,896.17	-6,743.48	1,696.42	6,944.00	1.07
18,999.00	89.80	159.20	11,894.94	-6,831.48	1,729.42	7,037.82	2.09
19,093.00	89.90	158.80	11,895.18	-6,919.24	1,763.10	7,131.61	0.44

### Daily Summary

Report Start Date 10/13/2017 06:00	Report End Date 10/14/2017 06:00	Footage (ftKB) 641.00	End Depth (ftKB) 19,238.0	Daily Field Est Total (Cost) 42,568.73	Cum Field Est To Date (Cost) 4,600,764.69
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Activity  
DRILL LATERAL @ 19,238.0

### 24hr Activity

Com
ROTATE WITH SURVEY'S F/18,597' T/18,785'. 188' @ 31.3 FT/HR WOB 25, SPM 96, SPP 6350, DIFF-250, GPM-252, RPM 80, TQ: 9360, MMRPM 131.
SLIDE F/ 18,785' TO 18,805' 20' @ 6.7 FT/HR WOB 30, SPM 96, SPP 6150, DIFF-150, GPM-252, MMRPM 131, TF-130L
ROTATE WITH SURVEY'S F/18,805' T/18,860'. 55' @ 36.7 FT/HR WOB 25, SPM 96, SPP 6350, DIFF-250, GPM-252, RPM 80, TQ: 9360, MMRPM 131.
SERVICE RIG AND TOP DRIVE.
ROTATE WITH SURVEY'S F/18,860' T/18,880'. 20' @ 40 FT/HR WOB 25, SPM 96, SPP 6350, DIFF-250, GPM-252, RPM 80, TQ: 9360, MMRPM 131.
SLIDE F/ 18,880' TO 18,900' 20' @ 10 FT/HR WOB 30, SPM 96, SPP 6050, DIFF-50, GPM-252, MMRPM 131, TF-180L
ROTATE WITH SURVEY'S F/18,900' T/18,975'. 75' @ 37.5 FT/HR WOB 22, SPM 95, SPP 6250, DIFF-500, GPM-252, RPM 80, TQ: 9360, MMRPM 131.
SLIDE F/ 18,975' TO 18,995' 20' @ 8 FT/HR WOB 24, SPM 95, SPP 5,780, DIFF-50, GPM-250, MMRPM 131, TF-170L
ROTATE WITH SURVEY'S F/18,995' T/19,238'. 243' @ 40.5 FT/HR WOB 22, SPM 95, SPP 6,350, DIFF-500, GPM-250, RPM 80, TQ: 9360, MMRPM 131.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/14/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
15.00	65

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 10/2/2017	Description SIDETRACK #3	EW Tie In (ft) -173.71	NT Tie In (ft) -634.67	Azimuth Tie In (°) 169.9	Inclination Tie In (°) 86.9	MD Tie In (ftKB) 12,502.00	TVD Tie In (ftKB) 11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
19,374.00	89.70	158.80	11,893.88	-7,182.43	1,861.51	7,410.35	1.23
19,468.00	91.40	161.80	11,892.98	-7,270.91	1,893.19	7,504.26	3.67
19,562.00	88.50	156.00	11,893.06	-7,358.56	1,927.01	7,598.01	6.90
19,656.00	91.30	162.30	11,893.22	-7,446.36	1,960.44	7,691.79	7.33
19,750.00	91.30	160.40	11,891.09	-7,535.39	1,990.50	7,785.74	2.02

Daily Summary			
Report Start Date 10/14/2017 06:00	Report End Date 10/15/2017 06:00	Footage (ftKB) 584.00	End Depth (ftKB) 19,822.0
Activity DRILL LATERAL @ 19,822.0		Daily Field Est Total (Cost) 33,812.00	Cum Field Est To Date (Cost) 4,634,576.69

24hr Activity
Com
DOWNLINKING MWD, RE-CYCLE PUMP. ROTATE WITH SURVEY'S F/19,238' T/19,632'. 394' @ 60.6 FT/HR WOB 28, SPM 90, SPP 6,175, DIFF-525, GPM 236, RPM 80, TQ: 10,340, MMRPM 123.  SLIDE F/ 19,632' TO 19,640' 8' @ 2.3 FT/HR WOB 22, SPM 90, SPP 6,050, DIFF-50, GPM-236, MMRPM 123, TF-90R SERVICE RIG SLIDE F/ 19,640' TO 19,644' 4' @ 4 FT/HR WOB 24, SPM 88, SPP 5,550, DIFF-50, GPM-236, MMRPM 120, TF-80R ROTATE WITH SURVEY'S F/19,644' T/19,655'. 11' @ 22 FT/HR WOB 22, SPM 88, SPP 5800, DIFF-250, GPM 236, RPM 80, TQ: 9,240, MMRPM 123. SLIDE F/ 19,655' TO 19,670' 15' @ 2.7 FT/HR WOB 22, SPM 88, SPP 5,550, DIFF-40, GPM-236, MMRPM 120, TF-80R ROTATE WITH SURVEY'S F/19,670' T/19,820'. 150' @ 38 FT/HR WOB 22, SPM 88, SPP 5900, DIFF-500, GPM 230, RPM 80, TQ: 9K, MMRPM 120. SLIDE F/ 19,820' TO 19,822' 2' @ 2.0 FT/HR WOB 20, SPM 88, SPP 5,550, DIFF-40, GPM-230, MMRPM 120, TF-HIGH SIDE



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/15/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	66

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
19,938.00	91.40	157.60	11,886.41	-7,711.01	2,057.38	7,971.31	1.81
20,032.00	93.50	158.60	11,882.40	-7,798.14	2,092.41	8,064.97	2.47
20,126.00	93.70	157.40	11,876.49	-7,885.12	2,127.55	8,158.52	1.29
20,221.00	93.80	157.40	11,870.28	-7,972.64	2,163.98	8,252.97	0.11
20,315.00	93.70	157.80	11,864.13	-8,059.36	2,199.72	8,346.46	0.44

### Daily Summary

Report Start Date 10/15/2017 06:00	Report End Date 10/16/2017 06:00	Footage (ftKB) 570.00	End Depth (ftKB) 20,392.0	Daily Field Est Total (Cost) 29,081.00	Cum Field Est To Date (Cost) 4,663,657.69
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Activity  
DRILL LATERAL @ 20,392.0

### 24hr Activity

Com
SLIDE F/19,822' T/19,827' 5' @ 3.3 FT/HR WOB 24, SPM 90, SPP 5,650, DIFF-40, GPM-236, MMRPM 123, TF-HIGH SIDE ROTATE WITH SURVEY'S F/19,827' T/20,196'. 369' @ 56.8 FT/HR WOB 24, SPM 88, SPP 6250, DIFF-375, GPM 236, RPM 80, TQ: 9K, MMRPM 123. SLIDE F/20,196' T/20,210'. 14' @ 5.6 FT/HR WOB 25, SPM 90, SPP 5,800, DIFF-40, GPM-236, MMRPM 123, TF-120R ROTATE WITH SURVEY'S F/20,210' T/20,271'. 61' @ 61 FT/HR WOB 24, SPM 88, SPP 6200, DIFF-450, GPM 236, RPM 80, TQ: 9K, MMRPM 123. SERVICE RIG AND TOP DRIVE. ROTATE WITH SURVEY'S F/20,271' T/20,291'. 20' @ 40 FT/HR WOB 22, SPM 90, SPP 6200, DIFF-450, GPM 236, RPM 80, TQ: 10K, MMRPM 123. SLIDE F/20,291' T/20,301'. 14' @ 5.6 FT/HR WOB 25, SPM 90, SPP 5,700, DIFF-20, GPM-236, MMRPM 123, TF-120R ROTATE WITH SURVEY'S F/20,301' T/20,365'. 64' @ 42.6 FT/HR WOB 22, SPM 90, SPP 5700, DIFF-400, GPM 236, RPM 80, TQ: 9K, MMRPM 123. L/D 2-JTS OF DRILL PIPE DUE TO WASH IN CONNECTION. RE-CYCLE PUMPS 3-TIMES FOR MWD SURVEY. ROTATE WITH SURVEY'S F/20,365' T/20,385'. 20' @ 40 FT/HR WOB 20, SPM 90, SPP 5700, DIFF-450, GPM 236, RPM 80, TQ: 9K, MMRPM 123. SLIDE F/20,385' T/20,389'. 10' @ 2.5 FT/HR WOB 27, SPM 90, SPP 5,700, DIFF-20, GPM-235, MMRPM 123, TF-100R L/D 2-JTS OF DRILL PIPE. CHECK TORQUE (LOW) ON ST-80. USED TONGS FOR PROPER TORQUE. SLIDE F/20,389' T/20,392'. 3' @ 2.0 FT/HR WOB 27, SPM 90, SPP 5,700, DIFF-20, GPM-235, MMRPM 123, TF-100R



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/16/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	81

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
20,032.00	93.50	158.60	11,882.40	-7,798.14	2,092.41	8,064.51	2.47
20,126.00	93.70	157.40	11,876.49	-7,885.12	2,127.55	8,158.07	1.29
20,221.00	93.80	157.40	11,870.28	-7,972.64	2,163.98	8,252.53	0.11
20,315.00	93.70	157.80	11,864.13	-8,059.36	2,199.72	8,346.03	0.44
20,408.00	91.50	155.10	11,859.91	-8,144.51	2,236.84	8,438.45	3.74

### Daily Summary

Report Start Date 10/16/2017 06:00	Report End Date 10/17/2017 06:00	Footage (ftKB) 132.00	End Depth (ftKB) 20,524.0	Daily Field Est Total (Cost) 70,409.96	Cum Field Est To Date (Cost) 4,734,067.65
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Activity  
TOOH @ 19,581'.

### 24hr Activity

Com
SLIDE F/20,392' T/20,394'. 2' @ 1.0 FT/HR WOB 27, SPM 90, SPP 5,700, DIFF-20, GPM-235, MMRPM 123, TF-120R. LOST PUMP PRESSURE AND 49K STRING WEIGHT. PIPE CAME UNSCREWED. ESTIMATE PIPE CAME UNSCREWED +/- 3,385'.
EASE BACK DOWN AND ATTEMPT TO SCREW BACK INTO DRILL PIPE TO DETERMINE IF CAME UNSCREWED. {SUCCESS}. PICK UP OFF BOTTOM, POOH F/20,394' T/20,271'. DICISSION WAS MADE TO GO BACK TO BOTTOM.
WASH AND REAM F/20,271' T/20,365'. SPP 2850, GPM 145, TQ: 5,900.
SWIVEL PACKING BLEW OUT. REMOVE AND REPLACE SAME.
SERVICE RIG AND TOP DRIVE.
WASH AND REAM F/20,271' T/20,365'. SPP 2850, GPM 145, WOB 10K TQ: 5,900. SLACK OFF TO 100K , CHECK TORQUE ON DRILL STRING TO 12,500K. PICK UP T/20,340' AND ROTATE SLOWLY TO BOTTOM
ROTATE WITH SURVEY'S F/20,394' T/20,427'. 33' @ 33 FT/HR WOB 28, SPM 90, SPP 6050, DIFF-475, GPM 236, RPM 80, TQ: 10/11K, MMRPM 123.
SLIDE F/20,427' T/20,432'. 5' @ 1.25 FT/HR WOB 30, SPM 90, SPP 5,700, DIFF-20, GPM-236, MMRPM 123, TF-115R.
ROTATE WITH SURVEY'S F/20,432' T/20,521'. 89' @ 35.6 FT/HR WOB 24, SPM 90, SPP 6450, DIFF-525, GPM 236, RPM 80, TQ: 10/11K, MMRPM 123.
SLIDE F/20,521' T/20,524'. 3' @ 1.5 FT/HR WOB 25, SPM 90, SPP 5,700, DIFF-20, GPM-236, MMRPM 123, TF-115R.
PIPE BACKED OFF DOWN HOLE WHILE ATTEMPTING TO SLIDE. ESTIMATE PIPE CAME UNSCREWED +/-1,292'. SCREWED BACK IN AND TORQUED TO 12,500 FT/LBS SURFACE TORQUE. L/D 1-JT TO ALLOW FULL STAND TO BE WORKED AND RECIPRICATED
RECIPRICATE FULL STAND AT 12 FT/MIN WHILE CIRCULATING 6X BU FOR CLEAN UP CYCLE. RPM 100, GPM 245, SPP 6100, OFF BOTTOM TQ REDUCED F/5784 T/4734.
POOH F/20,524' T/19,581' WHILE MONITORING WELLBORE.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/17/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
15.00	83

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 10/2/2017	Description SIDETRACK #3	EW Tie In (ft) -173.71	NS Tie In (ft) -634.67	Azimuth Tie In (°) 169.9	Inclination Tie In (°) 86.9	MD Tie In (ftKB) 12,502.00	TVD Tie In (ftKB) 11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
20,032.00	93.50	158.60	11,882.40	-7,798.14	2,092.41	8,064.51	2.47
20,126.00	93.70	157.40	11,876.49	-7,885.12	2,127.55	8,158.07	1.29
20,221.00	93.80	157.40	11,870.28	-7,972.64	2,163.98	8,252.53	0.11
20,315.00	93.70	157.80	11,864.13	-8,059.36	2,199.72	8,346.03	0.44
20,408.00	91.50	155.10	11,859.91	-8,144.51	2,236.84	8,438.45	3.74

Daily Summary				
Report Start Date 10/17/2017 06:00	Report End Date 10/18/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 20,524.0	Daily Field Est Total (Cost) 61,159.34
Cum Field Est To Date (Cost) 4,795,226.99				
Activity TIH @ 15,200'.				

24hr Activity
Com
CHECK FLOW, PUMP SLUG @ 19,581'. POOH F/19,581' T/8,936'. HOLE TAKING CALCULATED FILL ON TRIP TANK. PULL ROT. HEAD ELEMENT, INSTALL TRIP NIPPLE. POOH F/8,936' T/BHA. HAD TO USE TONG'S TO BREAK SOME OF DRILL PIPE. LAID DOWN AGITATOR. HOLE TAKING CALCULATED FILL ON TRIP TANK. POOH WITH BHA. FUNCTION BOP'S. DRAIN MOTOR, BREAK BIT. L/D MOTOR,BIT, PULL MWD AND MULE SHOE. PICK UP QES 4 3/4" MOTOR, 5:6 LOBE, 8.3 STAGE, 1.75° FIXED 1.0 REV/GAL. BIT TO BEND 4.22', BIT TO SURVEY 52', BIT TO GAMMA 38', WEAR PAD 5 1/4" OD, FLOW RATE 100-300 GPM. MAX DIFF. 1870. SCRIBE MOTOR, INSTALL NEW MULE SHOE IN UBHO SUB, INSTALL MWD. SURFACE TEST MOTOR. {OK} MAKE UP ULTERRA 6 1/8" U513M SER # 33717. CLEAN OBM OFF RIG FLOOR. TRIP IN HOLE TO 3,076'. HOLE GIVING CALCULATED DISPLACEMENT. FILL PIPE. TEST PSI BEFORE AGITATOR @230 GPM, 87 SPM = 1,740. P/U AGITATOR, TEST PSI AFTER 2,180. TIH F/3,076' TO 12,081' CHECKING EVERY BREAK TO 5,000'. FILLING PIPE EVERY 30 STANDS. HOLE GIVING CALCULATED DISPLACEMENT. REMOVE TRIP NIPPLE AND INSTALL ROTATING HEAD ELEMENT. SLIP & CUT 85' DRILL LINE. SERVICE RIG AND TOP DRIVE. TIH F/12,081' T/12,262'. FILL PIPE. TEST PSI BEFORE AGITATOR @224 GPM, 85 SPM = 3,250. P/U AGITATOR, TEST PSI AFTER 3,750. TEST MWD (GOOD) TRIP IN HOLE F/12,262' T/15,200'. FILLING PIPE EVERY 30 STANDS. HOLE GIVING CALCULATED DISPLACEMENT.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/18/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	87

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
20,315.00	93.70	157.80	11,864.13	-8,059.36	2,199.72	8,344.99	0.44
20,408.00	91.50	155.10	11,859.91	-8,144.51	2,236.84	8,437.44	3.74
20,528.00	94.40	158.80	11,853.74	-8,254.75	2,283.75	8,556.77	3.91
20,622.00	94.10	159.00	11,846.77	-8,342.21	2,317.50	8,650.37	0.38
20,726.00	93.80	158.80	11,839.61	-8,439.01	2,354.85	8,753.97	0.35

### Daily Summary

Report Start Date 10/18/2017 06:00	Report End Date 10/19/2017 06:00	Footage (ftKB) 265.00	End Depth (ftKB) 20,789.0	Daily Field Est Total (Cost) 29,189.00	Cum Field Est To Date (Cost) 4,824,415.99
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Activity  
DRILL LATERAL @ 20,789'

### 24hr Activity

Com
FILL PIPE, BREAK CIRCULATION. TROUBLE SHOOT MWD, NO PULSES. GOT MWD WORKING, PULSES GOOD. TIH F/15,200' T/20,298'. HOLE GIVING PROPER CALCULATED DISPLACEMENT. FILL PIPE EVERY 30 STANDS. HOLE SLICK GOING TOWARD BOTTOM. WASH AND REAM F/20,298' T/20,524' FOR SAFETY. WOB 7, GPM 232, SPP 5,850, RPM 60, MMRPM 232, TQ: 5K. ROTATE WITH SURVEY'S F/20,524' T/20,600'. 76' @ 25.3 FT/HR WOB 21, SPM 88, SPP 6100, DIFF-550, GPM 232, RPM 60, TQ: 7/8K, MMRPM 232. SLIDE F/20,600' T/20,613' (13' @ 1.5 FPH) WOB 37, SPM 89, SPP 5590, DIFF-0, GPM 235, MMRPM 235, TF 110R. ROTATE F/20,613' T/ 20,642' (29' @ 29 FPH). 18 WOB, 60 RPM, TQ 5-8K, 89 SPM, 6,050 PSI, 400 DIFF, 234 GPM, MMRPM 234. SPOT 50 BBLS OF BEADS 10 PPB. ROTATE @ 25 RPM, TQ 7-8K AND WORK INTO FORMATION. ROTATE F/20,642' T/ 20,684' (42' @ 28 FPH). 18 WOB, 60 RPM, TQ 5-8K, 89 SPM, 6,050 PSI, 400 DIFF, 234 GPM, MMRPM 234. SLIDE F/20,684' T/20,686' (2' @ .8 FPH) WOB 30, SPM 89, SPP 5590, DIFF-0, GPM 235, MMRPM 235, TF 130R. ROTATE F/20,686' T/ 20,789' (103' @ 34.3 FPH). 20 WOB, 60 RPM, TQ 5-8K, 89 SPM, 6,000 PSI, 450 DIFF, 234 GPM, MMRPM 234.





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/19/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	75

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
20,999.00	90.40	155.60	11,827.07	-8,691.83	2,456.82	9,023.10	3.09
21,093.00	90.00	155.10	11,826.74	-8,777.27	2,496.03	9,116.53	0.68
21,187.00	89.30	154.40	11,827.31	-8,862.28	2,536.12	9,209.86	1.05
21,281.00	89.00	154.40	11,828.71	-8,947.05	2,576.73	9,303.10	0.32
21,376.00	89.40	155.30	11,830.03	-9,033.03	2,617.10	9,397.43	1.04

### Daily Summary

Report Start Date 10/19/2017 06:00	Report End Date 10/20/2017 06:00	Footage (ftKB) 656.00	End Depth (ftKB) 21,445.0	Daily Field Est Total (Cost) 33,431.00	Cum Field Est To Date (Cost) 4,857,846.99
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Activity  
DRILL LATERAL @ 21,445'.

### 24hr Activity

Com
SLIDE F/20,789' T/20,793'. 4' @ 1.1 FT/HR, WOB 30, SPM 85, SPP 5300, DIFF-0, GPM 223, MMRPM 223, TF 160R. ROTATE WITH SURVEY'S F/20,793' T/20,863'. 70' @ 46.7 FT/HR WOB 19, SPM 85, SPP 5850, DIFF-500, GPM 223, RPM 75, TQ: 7/8K, MMRPM 223. { ORDER'S FROM OFFICE TO ROTATE OUT REST OF LATERAL TO TD, DUE TO BEING UNABLE TO SLIDE}. SERVICE RIG AND TOP DRIVE. ROTATE WITH SURVEY'S F/20,863' T/21,427'. 564' @ 32.2 FT/HR WOB 19, SPM 85, SPP 5850, DIFF-450, GPM 222, RPM 85, TQ: 7/9K, MMRPM 222.  TROUBLE SHOOT MWD. RECYCLE PUMP AND CHANGE TO PUMP #2 ROTATE WITH SURVEY'S F/21,427' T/21,445'. 18' @ 36 FT/HR WOB 19, SPM 85, SPP 5800, DIFF-450, GPM 222, RPM 85, TQ: 7/9K, MMRPM 222.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/20/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.00	64

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/20/2017 06:00	Report End Date 10/21/2017 06:00	Footage (ftKB) 672.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 33,081.00	Cum Field Est To Date (Cost) 4,890,927.99
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Activity  
CIRCULATING @ 22,117'.

### 24hr Activity

Com
ROTATE WITH SURVEY'S F/21,445' T/21,805'. 360' @ 40 FT/HR WOB 20, SPM 85, SPP 5875, DIFF-425, GPM 223, RPM 80, TQ: 7/9K, MMRPM 223. SERVICE RIG AND TOP DRIVE.
ROTATE WITH SURVEY'S F/21,805' T/22,117'. 312' @ 29.7 FT/HR WOB 20, SPM 85, SPP 5875, DIFF-425, GPM 223, RPM 80, TQ: 7/9K, MMRPM 223. TD'd WELL.
TAKE FINAL SURVEY. CBU @ 224 GPM, 5,500 PSI, 90 RPM, 6K TQ.
CHECK FLOW (STATIC). WIPER TRIP, F/22,117' T/21,567'. 250K P/U. 3.2 BBLs FILL. MONITOR WELL (FLOWING @ 1 BBL/5 MIN.)
WASH AND REAM F/21,567' T/22,117'. 200 GPM, 4,400 PSI, 75 RPM, 6/8K TQ.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/21/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.20	64

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/21/2017 06:00	Report End Date 10/22/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 55,660.76	Cum Field Est To Date (Cost) 4,946,588.75
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Activity  
CIRCULATING @ 12,175'.

### 24hr Activity

Com

CIRCULATE. PERFORM CLEAN UP CYCLE @ 22,117'. RECIPROCATATE PIPE FULL STAND @ 12 FT/MIN, RPM 105, GPM 232, SPP 5650, DIFF 100, MMRPM 232, TQ: 5450. RAISING MUD WT FROM 15.0 PPG TO 15.2 PPG. PUMPED A TOTAL OF 8 BOTTOMS UP @ 60,144 STROKES. {TOTAL GAS FIRST BOTTOMS UP 2700 UNITS MUD CUT 14.8 PPG}.

CHECK FLOW. GAINED 15 BBLS IN 25 MINUTES. SERVICE RIG AND TOP DRIVE..

CIRCULATE BOTTOMS UP. 188 GPM, 4,000 PSI, 60 RPM, 4K TQ, NO LOSSES. MAX GAS 1297. MUD CUT 14.4 PPG, CIRCULATED TILL WE HAD 15.2 PPG IN AND 15.2 PPG OUT.

CHECK FLOW. GAINED 6 BBLS IN 30 MINUTES.

DECISION MADE TO TOOH AND SPOT MUD CAP AT SHOE. TOOH F/22,117' T/21,192' (10 STDS) FILL WAS 3.8 BBLS/ CALCULATED 5.4 BBLS. PUMP 25 BBL SLUG.

TOOH F/21,195' T/12,175'. HOLE TAKING 1.0 BBL LESS THAN CALCULATED FILL (2.8 BBLS/5 STDS), UNTIL SLUG LEVELED OUT @ 16,125', STARTED TAKING 1.4 BBLS OVER CALCULATED FILL.

CIRCULATE BOTTOMS UP @ 12,175'. GPM 221, SPP 3575.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/22/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

Mud Properties	
Dens (lb/gal)	Vis (s/qt)
15.20	70

Rig Info
Rig
Scan, Producer

Rig Release Date
RR Date

Survey Information							
Date 10/2/2017	Description SIDETRACK #3	EW Tie In (ft) -173.71	NS Tie In (ft) -634.67	Azimuth Tie In (°) 169.9	Inclination Tie In (°) 86.9	MD Tie In (ftKB) 12,502.00	TVD Tie In (ftKB) 11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

Daily Summary				
Report Start Date 10/22/2017 06:00	Report End Date 10/23/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 52,201.00
Cum Field Est To Date (Cost) 4,998,789.75		Activity TIH @ 11,493'.		

24hr Activity
Com
CIRCULATE BOTTOMS UP @ 12,175'. GPM 221, SPP 3575. PUMP AND SPOT 50 BBLs OF 18.2 PPG MUD CAP OUTSIDE OF BIT. CHECK FLOW {OK}.
POOH F/12,175' T/10,221'. HOLE TAKING CALCULATED FILL ON TRIP TANK.
FILL PIPE, PUMP SLUG.
PULL ROT. HEAD ELEMENT, INSTALL TRIP NIPPLE
POOH F/10,221' T/BHA. L/D AGITATOR. HOLE TAKING CALCULATED FILL ON TRIP TANK.
FUNCTION BOP'S. DRAIN MOTOR, BREAK BIT, L/D MOTOR, BIT, UBHO, MONELS IN PREPERATION TO RUN 4 1/2" LINER.
SERVICE RIG AND TOP DRIVE.
CLEAN OBM OFF RIG FLOOR.
REMOVE WEAR BUSHING.
HELD PJSM WITH BYRD CASING CREW, SCAN, XTO FIELD SUPERINTENDANT, XTO REP., XTO SAFETY MAN.
RIG UP BYRD CASING CREW EQUIPMENT.
RUN 4 1/2" CASING HAS FOLLOW'S: M/U SHOE TRACK. 1- DOUBLE VALVE FLOAT SHOE {1.65'}, 1- 4 1/2", 13.5#, HCP-110 BTC CASING {42.45'} 1 - 4 1/2" DOUBLE VALVE FLOAT COLLAR {1.95'}, TEST FLOAT. 1 - 4 1/2", 13.5#, HCP-110 BTC CASING {42.43'}, 1 - 4 1/2" LANDING COLLAR {1.62'}, 1 - 4 1/2", 13.5# HCP-110 BTC CASING {42.44'}, 1 - 4 1/2" ALPHA TOE SLEEVE {3.64'}. TOTAL LENGTH {136.18'}. 30 JNTS - 4 1/2", 13.5# HCP-110 BTC CASING {1272.54'}, 1 MARKER JNT. {20.97'}, 36 JNTS - 4 1/2", 13.5# HCP-110 BTC CASING {1524.60'}. TOTAL PIPE {2,954.29'}.
HOSE ON POWER TONGS STARTED LEAKING. SHUT DOWN AND WAITED ON NEW HOSE TO ARRIVE. CHANGE OUT HOSE. MONITORED WELL (STATIC).
RUN 4 1/2" 13.5# HCP-110 BTC CASING 172 JTS - 4 1/2" 13.5# HCP-110 BTC CASING (7,335.51') 1-MAKER JT {21.42'}. 13 JTS - 4 1/2" 13.5# HCP-110 BTC CASING (562.90') 1- 4 1/2" 13.5# HCP-110 BTC PUB JT (5.37'), 1 - 5" 18# VHTT X 4 1/2" 13.5# HCP-110 BTC X OVER (1.16'), 1 - CONTROL SET LINER HANGER (14.39'), 1 - ZXP LINER TOP PACKER (23.90'), 1 - RUNNING TOOL (8.45'), 1 - 3 1/2" IF X 4" 14# XT 39 X OVER (1.83') F/ 2,954.29' T/10,929.22'. HOLE GIVING CALCULATED DISPLACEMENT.
R/D BYRD CASING TOOLS.
TIH WITH DRILL PIPE F/10,929' T/11,493'.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/23/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
15.20	74

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/23/2017 06:00	Report End Date 10/24/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 36,831.00	Cum Field Est To Date (Cost) 5,035,620.75
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Activity  
WASH AND REAM @ 16,581'.

### 24hr Activity

Com
PULL TRIP NIPPLE, INSTALL ROT. HEAD ELEMENT.
CIRCULATE BOTTOMS UP @ 11,493' TO CIRCULATE HALF OF 18.2 PPG MUD CAP. GPM 190, SPP 1460. LOST 50 BBLS MUD CIRCULATING.
TIH F/11,493' T/13,222'. ATTEMPT TO CIRCULATE, NO RETURNS, WORK PIPE. {NO SUCCESS}. LOST 25 BBLS TRYING TO GAIN CIRCULATION.
POOH F/13,222 T/12,064'. TO REGAIN CIRCULATION. HOLE TAKING CALCULATED FILL ON TRIP TANK.
ESTABLISH RETURNS, CIRCULATE BOTTOMS UP. @ 12,064' GPM 148, SPP 1430.
TIH F/12,064 T/13,001'. BREAK CIRCULATION AND CIRCULATE 15 MINUTES. GPM 182, SPP 1485. TIH F/13,001' T/14,248' BREAK CIRCULATION
CIRCULATE 10 MINUTES GPM 140, SPP 1260.
CIRCULATE BOTTOMS UP 100 GPM, 1,080 PSI, 25 RPM, 1-2K TQ. PARTIAL RETURNS. CUTTING MUD WEIGHT F/15.2 PPG T/15.0 PPG.
WASH AND REAM F/14,248' T/15,544', WHILE CUTTING MUD WEIGHT TO 14.9 PPG. CURRENT MUD WEIGHT 15.0 PPG. 105 GPM, 1260 PSI, 30 RPM,
2K TQ. PARTIAL RETURNS (85-90%).
CIRCULATE BOTTOMS UP. CUTTING MUD WEIGHT TO F/15.1 T/14.9 PPG, 103-111 GPM, 1,320 PSI, 30 RPM, 2K TQ. (95% RETURNS). HAD UP TO 15.8
PPG COMING BACK.
WASH AND REAM F/15,544' T/16,581', WHILE KEEPING MUD WEIGHT @ 15.0 PPG. CURRENT MUD WEIGHT 15.0 IN/ 14.8 OUT. 114 GPM, 1300 PSI, 30
RPM, 2K TQ. RETURNS (95%).



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/24/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.90	64

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/24/2017 06:00	Report End Date 10/25/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 61,303.00	Cum Field Est To Date (Cost) 5,082,531.75
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Activity  
WASH AND REAM @ 19,031'.

### 24hr Activity

Com
WASH AND REAM F/16,581' T/16,664', CUTTING MUD WEIGHT @ 14.9 PPG. CURRENT MUD WEIGHT 14.9 IN/ 15.2 OUT. 114 GPM, 1300 PSI, 30 RPM, 3K TQ. RETURNS (95%).
CIRCULATE BOTTOMS UP @ 16,644'. GPM 114, SPP 1300, TQ: 3K. AFTER BOTTOMS UP SPP 1132, TQ: 2K. MUD WT 14.9 IN 14.9+ OUT.
WASH AND REAM F/16,664' T/17,350', CURRENT MUD WEIGHT 14.9 IN/ 15.2 OUT. 78 GPM, 1080 PSI, 20 RPM, 3K TQ. RETURNS (95%). TQ: INCREASED TO 4800.
CIRCULATE BOTTOMS UP @ 17,350'. GPM 82, SPP 1030, TQ: 3K. AFTER BOTTOMS UP SPP 820, TQ: 2K. MUD WT 14.9 IN 15.0 OUT.
WASH AND REAM F/17,350' T/17,586', CURRENT MUD WEIGHT 14.9 IN/ 14.8 OUT. 78 GPM, 875 PSI, 20 RPM, 3K TQ. RETURNS (95%).
SERVICE RIG AND TOP DRIVE.
WASH AND REAM F/17,586' T/19,031', CURRENT MUD WEIGHT 14.9 IN/ 14.8 OUT. 78 GPM, 750 PSI, 25 RPM, 3K TQ. RETURNS (95%).



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/25/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.90	67

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/25/2017 06:00	Report End Date 10/26/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 30,203.00	Cum Field Est To Date (Cost) 5,112,734.75
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Activity  
WASH AND REAM @ 22,026'.

### 24hr Activity

Com
WASH AND REAM TO BOTTOM WITH PRODUCTION LINER F/ 19,031' TO 20,255' WOB-5-10, SPM-30, GPM-80, RPM-30, TQ. 200 TO 3900 SERVICE RIG
WASH AND REAM PRODUCTION LINER TO BOTTOM F/ 20,255' T/22,026'. 125 GPM, 1450 PSI, 30 RPM, 4-5K TQ, (95-100% RETURNS).



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/26/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
14.70	69

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/26/2017 06:00	Report End Date 10/27/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 30,203.00	Cum Field Est To Date (Cost) 5,251,296.06
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Activity  
L/D DRILL PIPE @ 4,200'

### 24hr Activity

Com
WASH AND REAM LINER F/22,026' T/22,108'. 125 GPM, 1350 PSI, 30 RPM, 5K TQ. CIRCULATE WITH RIG PUMP, WHILE WAITING ON HALLIBURTON CEMENTERS. ARRIVED 6 HRS LATE. DROPPED FIRST BALL AND WAITED 30 MIN. PRESSURED UP TO 1400# TO SET HANGER, BLOW BALL SEAT W/ 2350#, L/D PUP JT. AND DROPPED SECOND BALL, P/U BAKER CEMENT HEAD, PRESSURED UP TO 2000# AND BLEW BALL SEAT AND RELEASED LINER, P/U TO VERIFY LINER WAS GONE ( LOST LINER WT. ) HELD PJSM TEST LINES TO 8,500#, PUMP 30 BBL 15# SPACER AHEAD OF 960 SXS OF LEAD VERSACEM-H CEMENT, DENSITY 14.4 PPG, YIELD 1.246 FT3/SACK @ 5.72 GAL/SK (213 BBLS @ 5 BBL/M). RELEASE PLUG, DISPLACE WITH 171 BBLS FRESH WATER AND 113 BBLS OF 14.7# OBM, @ 6.0 BBL/M TOTAL OF 284 BBLS. BUMP PLUG 500 PSI OVER @ 2 BBL/M. FINAL BUMP 4000 PSI. RELEASE PSI, BLED BACK 3 BBLS TO TANKS. FLOATS HELD. SET PACKER AND PULLED OUT OF TOP OF LINER AND PREPARE TO REVERSE OUT REVERSED OUT WITH RIG PUMP. 27 BBLS OF CEMENT AND 30 BBLS OF SPACER BACK. LAYDOWN BAKER LINER/CEMENT HEAD DISPLACE OBM IN HOLE WITH BRINE WATER TEST LINER TOP TO 14.0 # EMW ( 2,543 PSI ) THE LAST SHOE TEST CLEANED RIG FLOOR AND HELD SAFETY MEETING ON LAYING DOWN DRILL PIPE L/D DRILL PIPE F/ 11,180' T/4,200'.





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/27/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/27/2017 06:00	Report End Date 10/28/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 283,871.25	Cum Field Est To Date (Cost) 5,535,167.31
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Activity  
REPAIRING TOP DRIVE.

### 24hr Activity

Com
CONTINUE L/D DRILL PIPE F/ 4443' TO BAKER RUNNING TOOL, LAST 69 JTS. WERE FULL OF CEMENT, DUE TO DOGS NOT COMING OUT ON RUNNING TOOL L/D RUNNING TOOL SERVICE RIG CLEANED CEMENT OFF OF RIG FLOOR AND TOP DRIVE AND DERRICK M/U INSERT BIT AND BIT SUB. TIH WITH DUMB IRON F/SURFACE T/8,907'. REPAIR TOP DRIVE.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/28/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/28/2017 06:00	Report End Date 10/29/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 29,678.00	Cum Field Est To Date (Cost) 5,564,845.31
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Activity  
MONITORING WELL.

### 24hr Activity

Com
REPAIRED TOP DRIVE SERVICE RIG CLEANED OIL OFF RIG FLOOR WASH AND REAM F/ 8943' SEEN CEMENT STRINGERS AT 9423' TO 9700' NO SOLID CEMENT WOB-5, GPM-250, RPM-50, TQ.-1700 MONITOR WELL FLOWING AT 4.0 BBLS AN HOUR. SHUT IN WELL AND MONITOR PRESSURES, WHILE WAITING ON MUD TO BE DELIVERED. PRESSURES RECORDED 20:00 ( DP-650) (CP-1,150), 21:00 (DP-825) (CP-1,150), 22:00 (DP-1,010) (CP-1,410), 23:00 (DP-1,110) (CP-1,700), 00:00 (DP-1,110) (CP-1,760), 01:00 (DP-1,120) (CP-2,000), 02:00 (DP-1,350) (CP-2,100), 03:00 (DP-1,640) (CP-2,150), 04:00 (DP-1,690) (CP-2,210), 05:00 (DP-1,710) (CP-2,210), 06:00 (DP-1,710) (CP-2,340).

**Partner - Drilling****Well Name: UNIVERSITY BLK 20 1310H****Date: 10/29/2017**

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

**Mud Properties**

Dens (lb/gal)	Vis (s/qt)

**Rig Info**

Rig
Scan, Producer

**Rig Release Date**

RR Date

**Survey Information**

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

**Daily Summary**

Report Start Date 10/29/2017 06:00	Report End Date 10/30/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 29,678.00	Cum Field Est To Date (Cost) 5,594,523.31
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Activity  
N/D BOP.**24hr Activity**

Com
HELD SAFETY MEETING W/ DAVE HARRIS DID FOSL TRAINGING WITH BOTH CREWS AND BOTH CO. MEN AND TOOL PUSHER WELL SHUT IN MONITORING PRESSURE @ 0600 CSG. PSI 2340 DRILL PIPE PSI 1710 PSI @ 1030 CSG. 2550 DRILL PIPE PSI 1750 LUBE AND BLEED CSG. PSI 2550,2000,1500,1150 DRILL PIPE PSI 1750,1700,1500,1200 PUMPED 2 BBLs. OF WATER SHUT WELL IN AND MONITOR PSI BUILT 80 PSI CIRC USING DRILLERS METHOD NO MUD WT. INCREASE THEN DISPLACED HOLE W/12.7 PPG MUD WELL IS STATIC  MONITOR WELL AND PULL ROTATING HEAD RUBBER AND INSTALL TRIP NIPPLE L/D DRILL PIPE MONITOR WELL ON TRIP TANK. F/11,189' T/SURFACE. HOLE TAKING CALCULATED FILL. CHECK FLOW (STATIC). DRAIN STACK. PUMP OUT CELLAR. SET BACK PRESSURE VALVE.



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 10/30/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date
10/30/2017 18:00

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
10/2/2017	SIDETRACK #3	-173.71	-634.67	169.9	86.9	12,502.00	11,977.78
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
21,753.00	86.00	152.50	11,848.44	-9,370.68	2,783.61	9,766.48	1.08
21,847.00	85.90	152.80	11,855.08	-9,453.96	2,826.69	9,859.25	0.34
21,941.00	85.00	152.30	11,862.54	-9,537.12	2,869.88	9,951.93	1.09
22,035.00	84.60	152.00	11,871.06	-9,619.89	2,913.61	10,044.42	0.53
22,065.00	84.30	152.30	11,873.96	-9,646.29	2,927.56	10,073.93	1.41

### Daily Summary

Report Start Date 10/30/2017 06:00	Report End Date 10/31/2017 06:00	Footage (ftKB) 0.00	End Depth (ftKB) 22,117.0	Daily Field Est Total (Cost) 35,655.57	Cum Field Est To Date (Cost) 5,624,336.49
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Activity  
RELEASED RIG @ 18:00 10/30/2017

### 24hr Activity

Com
R/D ELEVATORS, BALES AND CLEAN BOP'S AND R/D FLOWLINE, ROTATING HEAD W/ SPOOL, REMOVED HYD LINES AND HOOKED UP RIG UP LINES
NIPPLE DOWN BOP'S AND LIFTED STACK AND SET ONTO TROLLY
NIPPLE DOWN DSA AND INSTALLED NIGHT CAP ON WELL HEAD



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/11/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 7/11/2017 06:00	Report End Date 7/12/2017 06:00	Footage (ftKB)	End Depth (ftKB) 0.0	Daily Field Est Total (Cost) 28,121.00	Cum Field Est To Date (Cost) 150,424.00
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Activity  
RIGGING UP

### 24hr Activity

Com
STRING UP BLOCKS. HAD TO SLIP & CUT OFF 420' OF BAD DRILL LINE. DRILL LINE WAS TWISTED AND KEPT SEPARATING WHILE TRYING TO PUT INTO DOG NOT
HELD PRE-RAISE DERRICK INSPECTION. RAISED DERRICK AND RIG UP AIRHOIST ON RIG FLOOR.
HELD PRE JOB SAFETY MEETING ON PICKING UP TOP DRIVE
PICK UP AND HANG OFF TOP DRIVE IN DERRICK
SET CAT WALK AND V-DOOR
RIG UP TOP DRIVE WIRES AND HYDRAULIC LINES. RIG UP FLEX TRACK, TURN BUCKLES AND INSTALL NEW SWIVEL PACKING, RIG UP TONGS, DRESS OUT TOP DRIVE, RIG UP KELLY HOSE , STAND PIPE AND RIG FLOOR



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/12/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)

### Daily Summary

Report Start Date 7/12/2017 06:00	Report End Date 7/13/2017 06:00	Footage (ftKB)	End Depth (ftKB) 0.0	Daily Field Est Total (Cost) 16,046.00	Cum Field Est To Date (Cost) 170,598.00
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Activity  
M/U DIRECTIONAL BHA

### 24hr Activity

Com
FINISHED PUTTING CLAMP ON TOP DRIVE AND HOOKED UP GOOSE NECK AND KELLY HOSE, DRESSED OUT TOP DRIVE LOWER STANDPIPE IN SUBS TO STAB STANDPIPE ON RIG FLOOR R/U ST-80 AND SPINNER TONGS AND PIPE CAT ( V-DOOR ) STARTED DAY WORK @ 10:00 CHANGE LINERS IN #1 PUMP FROM 5" TO 5 1/2" RIG UP TRANSFER PUMPS FROM RESERVE PIT TO MUD TANKS AND SHAKER SLIDES AND FILLED MUD TANKS AND FRAC TANKS NIPPLE UP CONDUCTOER INSTALL FLOW LINE AND PVC ON BACK OF MUD TANKS P/U ALL LIFT SUBS AND FLOOR VALVES, INSTALLED MOUSE HOLE ATTEMPTED TO TEST SURFACE LINES SWIVEL PACKING LEAKING REPLACED O-RING PRESSURE TEST SURFACE LINES AND COMPLETE PRE SPUD INSPECTION LOAD PIPE RACKS WITH 9 5/8 MUD MTR. AND MONEL AND 6-8" DC'S AND 21-6 1/2" DC'S AND STRAP AND CALIBER SAME MAKE UP DIRECTIONAL TOOLS ( HARD TO HANDLE 9 5/8 MTR. WON'T FIT IN MOUSEHOLE ) SCRIBE MOTOR, INSTALL MWD, MOVED TRANSDUCER FROM STANDPIPE TO SUPER FLOW, SHALLOW TEST AND M/U BIT



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/13/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
10.10	30

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
1,852.00	2.10	15.20	1,851.50	35.97	4.69	35.97	1.16
2,042.00	2.30	18.00	2,041.36	42.96	6.78	42.96	0.12
2,231.00	2.30	36.90	2,230.21	49.60	10.23	49.60	0.40
2,421.00	2.80	38.50	2,420.02	56.28	15.41	56.28	0.27
2,610.00	3.00	38.50	2,608.78	63.76	21.36	63.76	0.11

### Daily Summary

Report Start Date 7/13/2017 06:00	Report End Date 7/14/2017 06:00	Footage (ftKB) 2,725.00	End Depth (ftKB) 2,850.0	Daily Field Est Total (Cost) 17,334.00	Cum Field Est To Date (Cost) 187,932.00
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Activity  
DRILLING SURFACE

### 24hr Activity

Com
P/U ROLLER REAMER AND 2 8" DC'S TO TAG BTM. @ 125'
ROTATE F/ 125' TO 431' (306') 76.5 FPH , WOB-20, RPM-60, GPM-725, TQ-.3K
SERVICE RIG
ROTATE F/ 431' TO 2670 (2239) 140.0 FPH, WOB-30, ROT-130, SPM-120/120, PSI-2450, DIFF-350, GPM-750, TQ-7K
SLIDE F/ 2670 T/ 2710 (40) 27 FPH , WOB-30, , SPM-120/120, PSI-2450, DIFF-350, GPM-750, TFO 180°
ROTATE F/ 2710' T/ 2850 (140) 93 FPH, WOB-30, ROT-130, SPM-120/120, PSI-2450, DIFF-350, GPM-750, TQ-7K



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/14/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
10.30	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
3,368.00	2.30	52.30	3,366.52	77.04	33.30	77.04	0.38
3,463.00	2.40	48.40	3,461.44	79.53	36.30	79.53	0.20
3,558.00	2.40	44.50	3,556.36	82.26	39.18	82.26	0.17
3,652.00	2.50	42.50	3,650.27	85.18	41.95	85.18	0.14
3,747.00	2.70	42.60	3,745.17	88.35	44.86	88.35	0.21

### Daily Summary

Report Start Date 7/14/2017 06:00	Report End Date 7/15/2017 06:00	Footage (ftKB) 971.00	End Depth (ftKB) 3,821.0	Daily Field Est Total (Cost) 39,823.30	Cum Field Est To Date (Cost) 227,753.30
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Activity  
DRILLING SURFACE

### 24hr Activity

Com
ROTATE F/ 2850' TO 3420' WOB-35, ROT-100, SPM-120/120, PSI-2800, DIFF-300, GPM-700, TQ.-9K SERVICE RIG ROTATE F/ 3420' TO 3821 (401) 42 FPH WOB-35, ROT-100, SPM-120/120, PSI-2800, DIFF-250, GPM-700, TQ.-9-11K CIRCULATE & BUILD SLUG , PUMP SLUG POOH F/ 3821 T/ SURFACE , DRAIN MOTOR INSPECT BEARING , B/O BIT, L/D BIT ( PULLED SLICK OFF BOTTOM , PROPER FILL ON TRIP , NO ISSUES) HOLD PRE JOB SAFETY MEETING , CLEAR FLOOR OF HAND TOOLS M/U U616S PDC BIT , TEST TOOL (POSITIVE TEST) STAGE IN HOLE W/ DIRECTIONAL TOOLS F/ SURFACE T/ 2250





## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/15/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
10.00	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
3,558.00	2.40	44.50	3,556.36	82.26	39.18	82.26	0.17
3,652.00	2.50	42.50	3,650.27	85.18	41.95	85.18	0.14
3,747.00	2.70	42.60	3,745.17	88.35	44.86	88.35	0.21
3,936.00	1.20	353.90	3,934.07	93.60	47.66	93.60	1.12
4,061.00	1.10	334.90	4,059.04	95.99	47.02	95.99	0.31

### Daily Summary

Report Start Date 7/15/2017 06:00	Report End Date 7/16/2017 06:00	Footage (ftKB) 293.00	End Depth (ftKB) 4,114.0	Daily Field Est Total (Cost) 17,705.00	Cum Field Est To Date (Cost) 245,458.30
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Activity  
DRILLING SURFACE

### 24hr Activity

Com
ROTATE F/ 3821' TO 3905 (84) 42 FPH WOB-30, ROT-100, SPM-120/120, PSI-2800, DIFF-250, GPM-770, TQ.-9K SLIDE F/ 3905 T/ 3945 (40) 20 FPH , WOB-30, , SPM-120/120, PSI-3200, DIFF-300, GPM-750, TFO 222° ROTATE F/ 3945' TO 3996 (51) 51 FPH WOB-30, ROT-100, SPM-120/120, PSI-3200, DIFF-350, GPM-770, TQ.-9K SERVICE RIG & TOP DRIVE ROTATE F/ 3996' TO 4114' (118) 14.7 FPH WOB-30, ROT-100, SPM-120/120, PSI-3450, DIFF-150, GPM-770, TQ.-6K CIRCULATE & BUILD SLUG , PUMP SLUG POOH F/ 4114 T/ BHA , DRAIN MOTOR INSPECT BEARING , B/O BIT, L/D BIT ( PULLED SLICK OFF BOTTOM , PROPER FILL ON TRIP , NO ISSUES)  RACK BACK BHA , REMOVE MWD , DRAIN MOTOR , B/O BIT AND LAY DOWN MOTOR AND BIT.( PULLED SLICK OFF BOTTOM , PROPER FILL ON TRIP , NO ISSUES) M/U NEW 9 5/8" MOTOR , INSTALL MWD , ORIENT TOOL , TEST TOOL (POSITIVE TEST) STAGE IN HOLE WITH DIRECTIONAL TOOLS @ 850



## Partner - Drilling

Well Name: UNIVERSITY BLK 20 1310H

Date: 7/16/2017

Well Name UNIVERSITY BLK 20 1310H	API/UWI 4249533713	State/Province Texas	County Winkler
Permit Number 813661	Spud Date 7/13/2017 06:30	Ground/Corrected Ground Elevation (ft) 2,812.00	KB-Ground Distance (ft) 26.50

### Mud Properties

Dens (lb/gal)	Vis (s/qt)
10.00	29

### Rig Info

Rig
Scan, Producer

### Rig Release Date

RR Date

### Survey Information

Date	Description	EW Tie In (ft)	NS Tie In (ft)	Azimuth Tie In (°)	Inclination Tie In (°)	MD Tie In (ftKB)	TVD Tie In (ftKB)
7/13/2017		0.00	0.00	0.0	0.0	0.00	0.00
MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)
4,597.00	1.50	20.80	4,594.91	107.57	49.00	107.57	0.17
4,692.00	1.60	29.30	4,689.88	109.89	50.09	109.89	0.26
4,787.00	1.60	46.20	4,784.84	111.97	51.70	111.97	0.49
4,881.00	1.60	46.90	4,878.80	113.77	53.61	113.77	0.02
4,976.00	1.40	46.90	4,973.77	115.47	55.42	115.47	0.21

### Daily Summary

Report Start Date 7/16/2017 06:00	Report End Date 7/17/2017 06:00	Footage (ftKB) 961.00	End Depth (ftKB) 5,075.0	Daily Field Est Total (Cost) 31,477.32	Cum Field Est To Date (Cost) 276,935.62
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Activity  
DRILLING SURFACE

### 24hr Activity

Com
TIH F/ 872' TO 4114'
ROTATE F/ 4114' TO 4280' (166) WOB-25, ROP-33, SPM-120/120, PSI-3250, DIFF-200, RPM-80, GPM-770, TQ.-9K
SERVICE RIG
ROTATE F/ 4280' TO 5075' (795) WOB-28, ROP-46 SPM-120/120, PSI-3500, DIFF-200, GPM-770, TQ.-9K