

11-29-14

SAU 320LH

WSI wireline/ rigless

Aaron Auld

07:30 AOL. Held PJSM and discussed JSA w/ crew. N/U FMC frac stack. R/U WSI wireline and RIH to 9664'. Ran CNL/CBL logs. R/D WSI wireline and secure well.

12-5-14 SAU 320 LH WEATHERFORD H24 FRAC / WSI WIRE LINE ENG: ANDREW WHELAN WOC:
RUSS RAMER/BILLY MADDEN FRAC STAGE 1 OF 35 NPT: (1630-2230) Weatherford frac. Lost main
generator. Did replace!

Set PEAK FLOW THRU PLUG @ 16635',

Perf Stage 1 of 35. (1230-1545) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 16635', total
pump down fluid 310bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ Note: Had
to move first set up due to setting tool design 16619'-23'/16532'-35 Total shots= 40 & fired= 40. Net
feet = 7'. Log out of hole.

Stage 1 of 35. (2259-0025) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1595, Break
down at 7325 psi @ 25.9bpm. Pump 1500 gal 15% Acid, Pump 48216 gal Slickwater Pre-Pad, Pump
57876 gal Slickwater Pad, Pump 27216 gal Slickwater w/ 20500 lbs of 100 MESH Sand, Pump 37044 gal
Slickwater w/ 42140 lbs of 40/70 White Sand, Pump 71022 gal Slickwater Flush. Max rate= 74.1 bpm,
Avg rate= 71.3 bpm, Max psi= 7342 psi, Avg psi= 6200 psi, ISIP= 2339 psi. FG= .68 Total load to recover
(5817) bbls

12-6-14 SAU 320 LH WEATHERFORD H24 FRAC / WSI WIRE LINE ENG: ANDREW WHELAN WOC:
RUSS RAMER/BILLY MADDEN FRAC STAGES 2-4 NPT: (18:30-2300)
WEATHERFORD DATA VAN BROKE DOWN SHUT DOWN TO REPAIR

Set PEAK FLOW THRU PLUG @ 16467',

Perf Stage 2 of 35. (00:45-03:15) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 16467',
total pump down fluid 310bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
16440'-44'/16345'-48 Total shots= 40 & fired= 40. Net feet = 7'.

Frac Stage (2 of 35). (03:45-05:00) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1727,
Break down at 7325 psi @ 25.9bpm. Pump 1500 gal 15% Acid, Pump 26,964 gal Slickwater Pre-Pad,
Pump 40,540 gal Slickwater gel Pad, Pump 31,878 gal Slickwater w/ 27,000 lbs of 40/70 white Sand
, Pump 27,006 gal Slickwater w/ 36,120 lbs of 40/70 White Sand, Pump 72,324 gal Slickwater w/ 174,980
lbs of 30/50 White Sand, Pump 16,002 gal Slickwater Flush. Max rate= 71.2 bpm, Avg rate= 67.0 bpm,
Max psi= 6786 psi, Avg psi= 6198 psi, ISIP= 2674 psi. FG= .71 Total load to recover (4,767)

Set PEAK FLOW THRU PLUG @ 16280',

Perf Stage 3 of 35. (05:25-08:25) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 16280',
total pump down fluid 310bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
16155'-58'/16250'-54 Total shots= 40 & fired= 40. Net feet = 7'.

Frac Stage (3 of 35). (08:40-10:25) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1867,
Break down at 6545 psi @ 8.8bpm. Pump 1500 gal 15% Acid, Pump 28,728 gal Slickwater Pre-Pad, Pump
44,352 gal Slickwater gel Pad, Pump 40,026 gal Slickwater w/ 29,700 lbs of 40/70 white Sand ,Pump
17,598 gal Slickwater w/ 33,920 lbs of 40/70 White Sand, Pump 68,400 gal Slickwater w/ 175,080lbs of
30/50 White Sand, Pump 15,824 gal Slickwater Flush. Max rate= 70.7 bpm, Avg rate= 66.7 bpm, Max
psi= 6834 psi, Avg psi= 6285 psi, ISIP= 2847 psi. FG= .73 Total load to recover (4,784)

Set PEAK FLOW THRU PLUG @ 16090'

Perf Stage 4 Of 35. (11:30-13:50) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 16090',
total pump down fluid 339bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
15965'-68'/16060'-64 Total shots= 40 & fired= 40. Net feet = 7'.

Frac Stage (4 of 35). (14:05-15:40) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1702,
Break down at 4774 psi @ 9.2bpm. Pump 1500 gal 15% Acid, Pump 27,594 gal Slickwater Pre-Pad, Pump
39,018 gal Slickwater gel Pad, Pump 33,306 gal Slickwater w/ 18,00 lbs of 40/70 white Sand ,Pump
22,596 gal Slickwater w/ 42,849 lbs of 40/70 White Sand, Pump 61,446 gal Slickwater w/ 12,240lbs of
20/40 White Sand, Pump 15,834 gal Slickwater Flush. Max rate= 70.8 bpm, Avg rate= 67.1 bpm, Max
psi= 6874 psi, Avg psi= 6065 psi, ISIP= 2747 psi. FG= .72 Total load to recover (4,438) bbls

Set PEAK FLOW THRU PLUG @ 15900'

Perf Stage 5 Of 35. (16:05-1802) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 15900', total pump down fluid 333bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ Note: Top shot moved up 3' to avoid collar 15772-75'/15870-74' Total shots= 40 & fired= 40. Net feet = 7'.

12-7-14 SAU 320 LH WEATHERFORD H24 FRAC / WSI WIRE LINE ENG: ANDREW WHELAN WOC: RUSS RAMER/BILLY MADDEN Perf stage; 6-10 Frac stage; 5- 9 NPT:(1204-0145) Weatherford Buffer broke down NPT: 11:25-12:45 LSE Crane had to run level program. Wellhead maintenance(2308-2400) FMC Greased Service frac tree.

Frac Stage (5 of 35). (0000-0247) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=, 1481psi Break/down 6,980 psi, 3,024 bbl' 15% Acid, Pump 109,914 gal Slickwater Pre-Pad, Pump 760,20 gal Slickwater gel Pad, Pump 68,460 gal Slickwater w/ 68,460 lbs of 40/70 white Sand ,Pump 19,278 gal Slickwater w/ 15,500 lbs of 20/40 White Sand, Pump 82,804 gal Slickwater w/ 157,020 lbs of 20/40 White Sand, Pump 15,834 gal Slickwater Flush. Max rate= 70.7 bpm, Avg rate= 69.1 bpm, Max psi= 7270psi, Avg psi= 6280 psi, ISIP= 2514 psi. FG= .70 Total load to recover (4,438)bbls

Set PEAK FLOW THRU PLUG @ 15,710'

Perf Stage 6 Of 35. (0315-0515) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 15,710', total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 15,680'/15,585 Total shots= 40 & fired= 40. Net feet = 7'.

Frac Stage (6 of 35).(0535-0710) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1556psi Break/down 6,173 psi @ 15.5bpm, 1,500 gal 15% Acid, Pump 30,366 gal Slickwater Pre-Pad, Pump 31,878 gal Slickwater gel Pad, Pump 25,536 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump 30,786 gal Slickwater w/ 42,400 lbs of 40/70 White Sand, Pump 68,880 gal Slickwater w/ 173,320 lbs of 30/50 White Sand, Pump 15,288 gal Slickwater Flush. Max rate= 71.4 bpm, Avg rate= 67.6 bpm, Max psi= 7,099psi, Avg psi= 6004 psi, ISIP= 2629 psi. FG= .71 Total load to recover (4,499)bbls

Set PEAK FLOW THRU PLUG @ 15,520'

Perf Stage 7 Of 35. (0740-0940) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 15,520', total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 15,395'/15,493' Note: Moved down 3' to avoid collar on 15490' gun. Total shots= 40 & fired= 40. Net feet = 7'.

Frac Stage (7 of 35).(0948-1125) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1591psi Break/down 5,647 psi @ 14.7bpm, 1,512 gal 15% Acid, Pump 25,452 gal Slickwater Pre-Pad, Pump 31,038 gal Slickwater gel Pad, Pump 24,738 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump 30,744 gal Slickwater w/ 44,480 lbs of 40/70 White Sand, Pump 67,074 gal Slickwater w/ 174,220 lbs of 30/50 White Sand, Pump 15,372 gal Slickwater Flush. Max rate= 70.8 bpm, Avg rate= 67.3 bpm, Max psi= 6,977psi, Avg psi= 6062 psi, ISIP= 2525 psi. FG= .70 Total load to recover (4,299) bbls

Set PEAK FLOW THRU PLUG @ 15,331' - set plug 1' low to avoid collar,

Perf Stage (8 of 35) (13:00-15:00) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 15,331' - set plug 1' low to avoid collar, total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 15,300'/15,205 Total shots= 40 & fired= 40. Net feet = 7'.

Frac Stage (8 of 35).(15:12-16:40) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1724psi Break/down 6,140 psi @ 15.1bpm , 1,512 gal 15% Acid, Pump 26,418 gal Slickwater Pre-Pad, Pump 31,080 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump 29,904 gal Slickwater w/ 44,620 lbs of 40/70 White Sand, Pump 66,822 gal Slickwater w/ 168,860 lbs of

30/50 White Sand, Pump 15,036 gal Slickwater Flush. Max rate= 70.6 bpm, Avg rate= 68.3 bpm, Max psi= 6,999psi, Avg psi= 6188 psi, ISIP= 3197 psi. FG= .77 Total load to recover (4,296) bbls

Set PEAK FLOW THRU PLUG @ 15,140"

Perf Stage 9 Of 35. (17:00-1920) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 15,140", 244 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 15,140/ 15,108' Total shots= 40 & fired= 40. Net feet = 7'.

Frac Stage (9 of 35).(11920-2057) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1888 psi Break/down 5060 psi @ 15.23bpm , 1,512 gal 15% Acid, Pump 45,192 gal Slickwater Pre-Pad, Pump 30,996 gal Slickwater gel Pad, Pump 51786 gal Slickwater w/ 39,500 lbs of 40/70 white Sand ,Pump 14,700 gal Slickwater w/ 24220 lbs of 40/70 White Sand, Pump 63,336 gal Slickwater w/ 170,640 lbs of 30/50 White Sand, Pump 198,440 gal Slickwater Flush. Max rate= 71.4 bpm, Avg rate= 69.7 bpm, Max psi= 7,227 si, Avg psi= 6218 psi, ISIP= 3,257 psi. FG= .78 Total load to recover (4,296) bbls

Set PEAK FLOW THRU PLUG @ 14,955"

Perf Stage 10 Of 35. (2110-2308) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 14,955", 244 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 14,920/ 14,825' Total shots= 40 & fired= 40. Net feet = 7'.

12-8-14 SAU 320 LH WEATHERFORD H24 FRAC / WSI WIRE LINE ENG: ANDREW WHELAN
WOC: RUSS RAMER/BILLY MADDEN FRAC STAGES 10-13NPT- (04:00-04:52) Weatherford pump
problems. NPT: (10:20-13:35) Weatherford Frac waiting on 40/70 sand. NPT: (1800-1900) Wait on
order's

Frac Stage (10 of 35).(2416-0144) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=2,028
psi Break/down 6755 psi @ 15.22bpm , 1,512 gal 15% Acid, Pump 36,498 gal Slickwater Pre-Pad, Pump
30,996 gal Slickwater gel Pad, Pump 29,778 gal Slickwater w/ 23,700 lbs of 40/70 white Sand ,Pump
26,082 gal Slickwater w/ 39,180 lbs of 40/70 White Sand, Pump 70,434 gal Slickwater w/ 170,880 lbs of
30/50 White Sand, Pump 199,340 gal Slickwater Flush. Max rate= 73.8 bpm, Avg rate= 70.0 bpm, Max
psi= 7,045 si, Avg psi= 6,162psi, ISIP= 2,997 psi. FG= .75 Total load to recover (195,300) GAL'S

Set PEAK FLOW THRU PLUG @ 14,760'

Perf Stage 11 Of 35. (0157-0400) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 14,760',
244 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
14,760/ 14,625' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (11 of 35).(04:52-06:25) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1,885
psi Break/down 6226 psi @ 15.36bpm , 1,512 gal 15% Acid, Pump 39,060 gal Slickwater Pre-Pad, Pump
30,996 gal Slickwater gel Pad, Pump 26,502 gal Slickwater w/ 22,000 lbs of 40/70 white Sand ,Pump
24,780 gal Slickwater w/ 38,260 lbs of 40/70 White Sand, Pump 72,114 gal Slickwater w/ 170,620 lbs of
30/50 White Sand, Pump 14,616 gal Slickwater Flush. Max rate= 74.8 bpm, Avg rate= 70.2 bpm, Max
psi= 7,582 si, Avg psi= 5,827psi, ISIP= 3,115 psi. FG= .76 Total load to recover (194,964) GAL'S

Set PEAK FLOW THRU PLUG @ 14,570'

Perf Stage 12 Of 35. (06:50-08:35) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 14,570',
257 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
14,540 / 14,445' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (12 of 35).(08:45-10:20) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=2,017
psi Break/down 6433 psi @ 14.7bpm , 1,512 gal 15% Acid, Pump 25,410 gal Slickwater Pre-Pad, Pump
31,038 gal Slickwater gel Pad, Pump 24,654 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump
31,206 gal Slickwater w/ 45,000 lbs of 40/70 White Sand, Pump 69,636 gal Slickwater w/ 175,120 lbs of
30/50 White Sand, Pump 14,742 gal Slickwater Flush. Max rate= 75 bpm, Avg rate= 65.4 bpm, Max psi=
7,002 si, Avg psi= 6,201psi, ISIP= 2,929 psi. FG= .74 Total load to recover (183,456) GAL'S

Set PEAK FLOW THRU PLUG @ 14,380'

Perf Stage 13 Of 35. (14:00-15:40) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 14,380',
239 bbls 4,600psi total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD.
Perforate @ 14,350 / 14,255' Total shots= 40 & fired= 40. Net feet= 7'.

Set PEAK FLOW THRU PLUG @ 14,380'

(RE) Perf Stage 13 Of 35. (1903-2100) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @
14,380', 237 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD.
Perforate @ 14,341 / 14,246' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (13 of 35).(2105-2230) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=2,182 psi Break/down 6444 psi @ 10.0 bpm , 4,536 gal's 15% Acid, Pump 73,668 gal Slickwater Pre-Pad, Pump 76,902 gal Slickwater gel Pad, Pump 24,846 gal Slickwater w/ 22,00 lbs of 40/70 white Sand ,Pump 27,174 gal Slickwater w/ 39,480 lbs of 40/70 White Sand, Pump 67,746 gal Slickwater w/ 170,740 lbs of 30/50 White Sand, Pump 14,112 gal Slickwater Flush. Max rate= 71.5 bpm, Avg rate= 70.0 bpm, Max psi= 6,734 si, Avg psi= 5,769 psi, ISIP= 3.122 psi. FG= .76 Total load to recover (289,002) GAL'S

12-9-14 SAU 320 LH WEATHERFORD H24 FRAC / WSI WIRE LINE ENG: ANDREW WHELAN
WOC: RUSS RAMER/BILLY MADDEN FRAC STAGES 14-18 Wellhead maintenance(1040-11:25) FMC
Greased Service frac tree.

Set PEAK FLOW THRU PLUG @ 14,190'

Perf Stage 14 Of 35. (2250-0020) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 14,190',
229 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
14,160 / 14,065' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (14 of 35).(2105-2230) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=1,978
psi Break/down 6,755 psi @ 15.2 bpm , 1,512 gal's 15% Acid, Pump 19,824 gal Slickwater Pre-Pad, Pump
20,832 gal Slickwater gel Pad, Pump 28,686 gal Slickwater w/ 22,000 lbs of 40/70 white Sand ,Pump
22,512 gal Slickwater w/ 41,900 lbs of 40/70 White Sand, Pump 71,610 gal Slickwater w/ 171,660 lbs of
30/50 White Sand, Pump 14,112 gal Slickwater Flush. Max rate= 71.9 bpm, Avg rate= 68.3 bpm, Max
psi= 7,338 si, Avg psi= 6,239 psi, ISIP= 3,272 psi. FG= .78 Total load to recover (179,088) GAL'S

Set PEAK FLOW THRU PLUG @ 14,000'

Perf Stage 15 Of 35. (0221-0431) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 14,000',
201 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
13,970/ 13,875' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (15 of 35).(0457-0635) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=2,028
psi Break/down 6,859 psi @ 14.34 bpm , 1,512 gal's 15% Acid, Pump 26,166 gal Slickwater Pre-Pad,
Pump 26,334 gal Slickwater gel Pad, Pump 25,536 gal Slickwater w/ 18,000 lbs of 40/70 white Sand
,Pump 31,920 gal Slickwater w/ 42,060 lbs of 40/70 White Sand, Pump 66,276 gal Slickwater w/ 169,520
lbs of 20/40 White Sand, Pump 14,364 gal Slickwater Flush. Max rate= 72.9 bpm, Avg rate= 69.4 bpm,
Max psi= 7,135 psi, Avg psi= 6,390 psi, ISIP= 3,390 psi. FG= .79 Total load to recover (192,108) GAL'S

Set PEAK FLOW THRU PLUG @ 13,810'

Perf Stage 16 Of 35. (0650-0845) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 13,810',
211 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
13,780/13,685' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (16 of 35).(0855-1035) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP=2,178
psi Break/down 6,537 psi @ 15.5 bpm , 1,512 gal's 15% Acid, Pump 12,054 gal Slickwater Pre-Pad, Pump
31,038 gal Slickwater gel Pad, Pump 24,738 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump
30,744 gal Slickwater w/ 47,620 lbs of 40/70 White Sand, Pump 69,342 gal Slickwater w/ 169,880 lbs of
20/40 White Sand, Pump 13,734 gal Slickwater Flush. Max rate= 71.3 bpm, Avg rate= 68.8 bpm, Max
psi= 7,002 psi, Avg psi= 5,960 psi, ISIP= 3,165 psi. FG= .77 Total load to recover (183,162) GAL'S

Set PEAK FLOW THRU PLUG @ 13,624'

Perf Stage 17 Of 35. (11:30-13:20) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 13,624',
188 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
13,590/13,494' Total shots= 40 & fired= 40. Net feet= 7'. Note: Moved plug down 4' to avoid collar
and moved top shot up 1' to 13,494' to avoid collar.

Set PEAK FLOW THRU PLUG @ 13,624'

(RE) Perf Stage 17 Of 35. (15:45-1745) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 13,624', 243 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 13,584' / 13,490' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (17 of 35).(1815-1934) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 1,971 psi Break/down 6,673 psi @ 40.8 bpm , 4,578 gal's 15% Acid, Pump 29,022 gal Slickwater Pre-Pad, Pump 111,006 gal Slickwater gel Pad, Pump 36,120 gal Slickwater w/ 23,000 lbs of 40/70 white Sand ,Pump 22,848 gal Slickwater w/ 40,840 lbs of 40/70 White Sand, Pump 63,798 gal Slickwater w/ 169,946 lbs of 20/40 White Sand, Pump 13,398 gal Slickwater Flush. Max rate= 71.3 bpm, Avg rate= 68.8 bpm, Max psi= 7,002 psi, Avg psi= 5,960 psi, ISIP= 3,165 psi. FG= .77 Total load to recover (280,770) GAL'S

Set PEAK FLOW THRU PLUG @ 13,420'

Perf Stage 18 Of 35. (1957-2137) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 13,420', 192 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 13,400/13,305' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (18 of 35).(2155-2340) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,042 psi Break/down 6,945 psi @ 9.28 bpm , 1,512 gal's 15% Acid, Pump 25,746 gal Slickwater Pre-Pad, Pump 35,028 gal Slickwater gel Pad, Pump 26,754 gal Slickwater w/ 25,500 lbs of 40/70 white Sand ,Pump 31,164 gal Slickwater w/ 35,060 lbs of 40/70 White Sand, Pump 66,864 gal Slickwater w/ 172,940 lbs of 20/40 White Sand, Pump 13,314 gal Slickwater Flush. Max rate= bpm, Avg rate= 70.4 bpm, Max psi= 7,427 psi, Avg psi= 6,7.4 psi, ISIP= 3,276 psi. FG= .78 Total load to recover (200,382) GAL'S

12-10-14 SAU 320 LH WEATHERFORD H24 FRAC / WSI WIRE LINE ENG: ANDREW WHELAN WOC:
RUSS RAMER/BILLY MADDEN Perf stages 19,20,21,22,23,24 Frac stages 19,20,21,22,23,24

Set PEAK FLOW THRU PLUG @ 13,240'

Perf Stage 19 Of 35. (0005-0122) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 13,240',
192 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
13,210/13,115' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (19 of 35).(0202-0346) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,128
psi Break/down 7,077 psi @ 14.9 bpm , 1,512 gal's 15% Acid, Pump 26,694 gal Slickwater Pre-Pad, Pump
30,996 gal Slickwater gel Pad, Pump 28,056 gal Slickwater w/ 22,750 lbs of 40/70 white Sand ,Pump
25,032 gal Slickwater w/ 39,790 lbs of 40/70 White Sand, Pump 61,278 gal Slickwater w/ 167,820 lbs of
20/40 White Sand, Pump 13,104 gal Slickwater Flush. Max rate= bpm, Avg rate= 69.6 bpm, Max psi=
7,184 psi, Avg psi= 5,531 psi, ISIP= 3,237 psi. FG= .77 Total load to recover (189,672) GAL'S

Set PEAK FLOW THRU PLUG @ 13,050'

Perf Stage 20 Of 35. (0407-0530) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 13,050',
187 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
13,020/12,925' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (20 of 35).(0645-0825) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,021
psi Break/down 6,623 psi @ 15.2 bpm , 1,512 gal's 15% Acid, Pump 11,928 gal Slickwater Pre-Pad, Pump
31,248 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump
30,828 gal Slickwater w/ 43,240 lbs of 40/70 White Sand, Pump 65,268 gal Slickwater w/ 174,860 lbs of
20/40 White Sand, Pump 12,978 gal Slickwater Flush. Max rate= 66.8 bpm, Avg rate= 65.5 bpm, Max
psi= 7,024 psi, Avg psi= 5,854 psi, ISIP= 3,551 psi. FG= .81 Total load to recover (178,458) GAL'S

Set PEAK FLOW THRU PLUG @ 12,860'

Perf Stage 21 Of 35. (0845-1025) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 12,860',
155 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
12,830'/12,735' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (21 of 35).(1040-1225) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,014
psi Break/down 6,541 psi @ 15.4 bpm , 1,512 gal's 15% Acid, Pump 9,030 gal Slickwater Pre-Pad, Pump
31,038 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump
30,786 gal Slickwater w/ 48,380 lbs of 40/70 White Sand, Pump 77,784 gal Slickwater w/ 167,100 lbs of
20/40 White Sand, Pump 12,852 gal Slickwater Flush. Max rate= 70.5 bpm, Avg rate= 68.9 bpm, Max
psi= 6,899 psi, Avg psi= 5,896 psi, ISIP= 3,616 psi. FG= .81 Total load to recover (187,698) GAL'S

Set PEAK FLOW THRU PLUG @ 12675'

Perf Stage 22 Of 35. (1240-1410) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 12675',
155 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
12,640'/12,,542' Total

Frac Stage (22 of 35).(1430-1555) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,160
psi Break/down 6,451 psi @ 14.9 bpm , 1,512 gal's 15% Acid, Pump 8,988 gal Slickwater Pre-Pad, Pump

31,038 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump 30,786 gal Slickwater w/ 48,280 lbs of 40/70 White Sand, Pump 77,784 gal Slickwater w/ 173,040 lbs of 20/40 White Sand, Pump 12,684 gal Slickwater Flush. Max rate= 71.8 bpm, Avg rate= 70.4bpm, Max psi= 6,920 psi, Avg psi= 5,904 psi, ISIP= 3,562 psi. FG= .81 Total load to recover (179,256) GAL'S

Set PEAK FLOW THRU PLUG @ 12480',

Perf Stage 23 Of 35. (1605-1726) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 12480', 155 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 12,450'/12,,355' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (23 of 35).(1749-1913) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,131 psi Break/down 5,267 psi @ 14.8 bpm , 1,512 gal's 15% Acid, Pump 19,782 gal Slickwater Pre-Pad, Pump 30,996 gal Slickwater gel Pad, Pump 37,926 gal Slickwater w/ 28,500 lbs of 40/70 white Sand ,Pump 25,704 gal Slickwater w/ 31,820 lbs of 40/70 White Sand, Pump 65,688 gal Slickwater w/ 169,480 lbs of 20/40 White Sand, Pump 12,390 gal Slickwater Flush. Max rate= 71.0 bpm, Avg rate= 69.9 bpm, Max psi= 71.0 psi, Avg psi= 5,465 psi, ISIP= 3,322 psi. FG= .78 Total load to recover (193,998) GAL'S

Set PEAK FLOW THRU PLUG @ 12290'

Perf Stage 24 Of 35. (1926-????) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 12290', 152 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 12,260'/12,165' Total shots= 40 & fired= 40. Net feet= 7'.

Frac Stage (24 of 35).(2140-2312) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,056 psi Break/down 5,725 psi @ 15.36 bpm , 1,512 gal's 15% Acid, Pump 25,914 gal Slickwater Pre-Pad, Pump 30,996gal Slickwater gel Pad, Pump 37,968 gal Slickwater w/ 29,000 lbs of 40/70 white Sand ,Pump 27,804 gal Slickwater w/ 35,440 lbs of 40/70 White Sand, Pump 69,972 gal Slickwater w/ 168.060 lbs of 20/40 White Sand, Pump 12,222 gal Slickwater Flush. Max rate= 70.4 bpm, Avg rate= 69.7 bpm, Max psi= 7.095 psi, Avg psi= 5,743 psi, ISIP= 3,390 psi. FG= .79 Total load to recover (206,388) GAL'S

12-11-14 SAU 320 LH WEATHERFORD H24 FRAC / WSI WIRE LINE ENG: ANDREW WHELAN
WOC: RUSS RAMER/BILLY MADDEN FRAC STAGES COMPLETED: 25-29 & PERF STAGES COMPLETED:
25-30 Set PEAK FLOW THRU PLUG @ 12,100', Perf Stage 25 Of 35. (2331-0048) SPRAYBERRY
FORMATION Frac Stage (25 of 35).(0108-0233) SPRAYBERRY FORMATION. Perf Stage 26 Of 35.
(0246-0412) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 11,910', NPT: (0412-0650)
Weatherford swapped out pump # 8.Had a bent pull rod. Frac Stage (26 of 35).(0650-0825)
SPRAYBERRY FORMATION. Set PEAK FLOW THRU PLUG @ 11,720', Perf Stage 27 Of 35. (0845-1010)
SPRAYBERRY FORMATION Frac Stage (27 of 35).(1020-1149) SPRAYBERRY FORMATION. Set PEAK
FLOW THRU PLUG @ 11,530', Perf Stage 28 Of 35. (1200-1605) SPRAYBERRY FORMATION NPT:
(1300-1525) Weatherford WL: Plug failed to set caused by a misfire with igniter in setting tool, POOH
and re-dress then RIH and set. NPT from time of misfire on plug until

Set PEAK FLOW THRU PLUG @ 12,100',

Perf Stage 25 Of 35. (2331-0048) SPRAYBERRY FORMATION 125 bbls total pump down fluid bbl. Perf
stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 12,070'/11,975' Total shots= 40 &
fired= 40. Net feet= 7'.

Frac Stage (25 of 35).(0108-0233) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,178
psi Break/down 5,686 psi @ 13.9 bpm , 1,512 gal's 15% Acid, Pump 23,772 gal Slickwater Pre-Pad, Pump
30,996 gal Slickwater gel Pad, Pump 33,768 gal Slickwater w/ 25,300 lbs of 40/70 white Sand ,Pump
24,738 gal Slickwater w/ 41,180 lbs of 40/70 White Sand, Pump 68,880 gal Slickwater w/ 170,320 lbs of
20/40 White Sand, Pump 12,096 gal Slickwater Flush. Max rate= 70.8 bpm, Avg rate= 70.1 bpm, Max
psi= 7.8 psi, Avg psi= 6,098 psi, ISIP= 3,483 psi. FG= .80Total load to recover (206,388) GAL'S

Set PEAK FLOW THRU PLUG @ 11,910',

Perf Stage 26 Of 35. (0246-0412) SPRAYBERRY FORMATION 118 bbls total pump down fluid bbl. Perf
stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 11,880'/11,785' Total shots= 40 &
fired= 40. Net feet= 7'. NPT: (0412-0650) Weatherford swapped out pump # 8.Had a bent pull rod.

Frac Stage (26 of 35).(0650-0825) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,071
psi Break/down 6,137 psi @ 14.0 bpm , 1,512 gal's 15% Acid, Pump 8,946 gal Slickwater Pre-Pad, Pump
31,080 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump
30,786 gal Slickwater w/ 46,100 lbs of 40/70 White Sand, Pump 69,090 gal Slickwater w/ 171,280 lbs of
20/40 White Sand, Pump 11,970 gal Slickwater Flush. Max rate= 71.4 bpm, Avg rate= 70.0 bpm, Max
psi= 6,959 psi, Avg psi= 6,144 psi, ISIP= 4,525 psi. FG= .88 Total load to recover (178,080) GAL'S

Set PEAK FLOW THRU PLUG @ 11,720',

Perf Stage 27 Of 35. (0845-1010) SPRAYBERRY FORMATION 113 bbls total pump down fluid bbl. Perf
stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 11,690'/11,594' Total Shots = 40 &
fired= 40. Net feet= 7'. Moved top perforation up 1' to avoid collar to 11,594'.

Frac Stage (27 of 35).(1020-1149) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,099
psi Break/down 6,859 psi @ 15.8 bpm , 1,512 gal's 15% Acid, Pump 8,904 gal Slickwater Pre-Pad, Pump
31,038 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump
30,828 gal Slickwater w/ 46,380 lbs of 40/70 White Sand, Pump 68,208 gal Slickwater w/ 172,240 lbs of

20/40 White Sand, Pump 11,844 gal Slickwater Flush. Max rate= 70.7 bpm, Avg rate= 69.6 bpm, Max psi= 6,945 psi, Avg psi= 5,846 psi, ISIP= 3,616 psi. FG= .81 Total load to recover (177,030) GAL'S

Set PEAK FLOW THRU PLUG @ 11,530',

Perf Stage 28 Of 35. (1200-1605) SPRAYBERRY FORMATION 227 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 11,500'/11,405' Total Shots = 40 & fired= 40. Net feet= 7'. NPT: (1300-1525) Weatherford WL: Plug failed to set caused by a misfire with igniter in setting tool, POOH and re-dress then RIH and set. NPT from time of misfire on plug until plug was set.

Frac Stage (28 of 35).(1610-1729) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 1,953 psi Break/down 5,614 psi @ 16 bpm , 1,512 gal's 15% Acid, Pump 8,988 gal Slickwater Pre-Pad, Pump 31,038 gal Slickwater gel Pad, Pump 24,738 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump 30,786 gal Slickwater w/ 45,240 lbs of 40/70 White Sand, Pump 68,586 gal Slickwater w/ 173,000 lbs of 20/40 White Sand, Pump 11,634 gal Slickwater Flush. Max rate= 70.6 bpm, Avg rate= 68.9 bpm, Max psi= 6,952 psi, Avg psi= 5,759 psi, ISIP= 3,262 psi. FG= .78 Total load to recover (177,282) GAL'S

Set PEAK FLOW THRU PLUG @ 11,340',

Perf Stage 29 Of 35. (0545-1924) SPRAYBERRY FORMATION 218 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 11,310'/11,215' Total Shots = 40 & fired= 40. Net feet=7 FMC (1927-1951) Greased frac tree!

Frac Stage (29 of 35).(2005-2134) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,038 psi Break/down 6,709 psi @ 15.6 bpm , 1,512 gal's 15% Acid, Pump 23,986 gal Slickwater Pre-Pad, Pump 30,996 gal Slickwater gel Pad, Pump 26,922 gal Slickwater w/ 20,200 lbs of 40/70 white Sand ,Pump 27,636 gal Slickwater w/ 44,520 lbs of 40/70 White Sand, Pump 68,376 gal Slickwater w/ 170,260 lbs of 20/40 White Sand, Pump 11,340 gal Slickwater Flush. Max rate= 70.9 bpm, Avg rate= 69.1 bpm, Max psi= 7,127 psi, Avg psi= 6,024 psi, ISIP= 3,587 psi. FG= .81 Total load to recover (190,764) GAL'S

Set PEAK FLOW THRU PLUG @ 11,150',

Perf Stage 30 Of 35. (2141-2400) SPRAYBERRY FORMATION 218 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 11,120'/11,025' Total Shots = 40 & fired= 40. Net feet=7

12-12-14 SAU 320 LH WEATHERFORD H24 FRAC / WSI WIRE LINE RUSS RAMER/BILLY MADDEN
FRAC STAGES 30-35; PERF STAGES 31-35 NPT: (0321-0535) Weatherford Frac pumps #2 had
mechanical issues with bladder and #6 had bad cable. FMC (1540-1605) Frac tree Maintenance
WELL FRAC IS COMPLETE 35 Stage's- X-link 3,347,484 gal's, Fluid to recover 6,978,006 gal's,
AMT:30/50 sand used 510,920 pd's, 40/70 sand used 2,222,260 pd's, 20/40 sand used 5,481,450 pd's
ISIP stage (1) 2,339 psi, ISIP stage (35) 3,051 psi F.G stage (1).68, F.G stage (35) .75

Frac Stage (30 of 35).(0018-0139) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 1,949
psi Break/down 7,091 psi @ 8 bpm , 1,512 gal's 15% Acid, Pump 23,226gal Slickwater Pre-Pad, Pump
30,996 gal Slickwater gel Pad, Pump 31,668 gal Slickwater w/ 24,500 lbs of 40/70 white Sand ,Pump
21,252 gal Slickwater w/ 39,680 lbs of 40/70 White Sand, Pump 66,570 gal Slickwater w/ 170,600lbs of
20/40 White Sand, Pump 11,382 gal Slickwater Flush. Max rate= 70.4 bpm, Avg rate= 69.9 bpm, Max
psi= 7,774 psi, Avg psi= 6,099 psi, ISIP= 3,330psi. FG= .78Total load to recover (186.606) GAL'S

Set PEAK FLOW THRU PLUG @ 10,950

Perf Stage 31 Of 35. (0147-0321) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 10,950 78
bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
10,930'/110,835' Total Shots = 40 & fired= 40. Net feet=7

Frac Stage (31 of 35).(0535-0705) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,092
psi Break/down 6,040 psi @ 15.5 bpm , 1,512 gal's 15% Acid, Pump 20,958 gal Slickwater Pre-Pad, Pump
30,912 gal Slickwater gel Pad, Pump 24,780 gal Slickwater w/ 19,000 lbs of 40/70 white Sand ,Pump
27,468 gal Slickwater w/ 48,240 lbs of 40/70 White Sand, Pump 65,898 gal Slickwater w/ 173,600 lbs of
20/40 White Sand, Pump 11,088 gal Slickwater Flush. Max rate= 70.7 bpm, Avg rate= 69.0 bpm, Max
psi= 6,974 psi, Avg psi= 5,741 psi, ISIP= 4,020 psi. FG= .86 Total load to recover (182,700) GAL'S

Set PEAK FLOW THRU PLUG @ 10,767

Perf Stage 32 Of 35. (0730-0905) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 10,767 76
bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
10,740'/10,648' Total Shots = 40 & fired= 40. Net feet=7 Note: Moved plug up 3' to avoid collar and
top perforation down 3' to avoid collar.

Frac Stage (32 of 35).(0915-1047) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,214
psi Break/down 5,514 psi @ 15.4 bpm , 1,512 gal's 15% Acid, Pump 8,988 gal Slickwater Pre-Pad, Pump
31,038 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 20,000 lbs of 40/70 white Sand ,Pump
30,828 gal Slickwater w/ 44,260 lbs of 40/70 White Sand, Pump 65,226 gal Slickwater w/ 169,674 lbs of
20/40 White Sand, Pump 10,752 gal Slickwater Flush. Max rate= 72.2 bpm, Avg rate= 70.2 bpm, Max
psi= 6,033 psi, Avg psi= 5,471 psi, ISIP= 3,465 psi. FG= .80 Total load to recover (173,082) GAL'S

Set PEAK FLOW THRU PLUG @ 10,580

Perf Stage 33 Of 35. (1105-1225) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 10,580 73
bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @
10,550'/10,455' Total Shots = 40 & fired= 40. Net feet=7

Frac Stage (33 of 35).(1240-1410) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,117
psi Break/down 5,289 psi @ 13.3 bpm , 1,512 gal's 15% Acid, Pump 10,416 gal Slickwater Pre-Pad, Pump

31,038 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 18,000 lbs of 40/70 white Sand ,Pump 30,786 gal Slickwater w/ 48,360 lbs of 40/70 White Sand, Pump 68,838 gal Slickwater w/ 171,120 lbs of 20/40 White Sand, Pump 10,626 gal Slickwater Flush. Max rate= 74.2 bpm, Avg rate= 70.0 bpm, Max psi= 6,505 psi, Avg psi= 5,240 psi, ISIP= 3,469 psi. FG= .80 Total load to recover (177,912) GAL'S

Set PEAK FLOW THRU PLUG @ 10,390'

Perf Stage 34 Of 35. (1420-1535) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 10,390' 61 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 10,357'/10,265' Total Shots = 40 & fired= 40. Net feet=7 Note: Moved 10,360' perforation up 3' to 10,357' in order to avoid collar.

Frac Stage (34 of 35).(1508-1735) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,146 psi Break/down 56,881 psi @ 14.4 bpm , 1,512 gal's 15% Acid, Pump 9,072 gal Slickwater Pre-Pad, Pump 31,038 gal Slickwater gel Pad, Pump 24,696 gal Slickwater w/ 19,000 lbs of 40/70 white Sand ,Pump 30,828 gal Slickwater w/ 45,780 lbs of 40/70 White Sand, Pump 62,664 gal Slickwater w/ 180,840 lbs of 20/40 White Sand, Pump 10,458 gal Slickwater Flush. Max rate= 70.4 bpm, Avg rate= 69.7 bpm, Max psi= 7,045 psi, Avg psi= 5,228 psi, ISIP= 3,176 psi. FG= .77 Total load to recover (170,268) GAL'S

Set PEAK FLOW THRU PLUG @ 10,200

Perf Stage 35 Of 35. (1746-1900) SPRAYBERRY FORMATION Set PEAK FLOW THRU PLUG @ 10,200 69 bbls total pump down fluid bbl. Perf stage w/ 3 1/8" Slick guns 21.5 charge 0.42" EHD. Perforate @ 10,170'/10,075' Total Shots = 40 & fired= 40. Net feet=7

Frac Stage (35 of 35).(1940-2107) SPRAYBERRY FORMATION. RU WEATHERFORD FRAC. SICP= 2,031 psi Break/down 7,016 psi @ 14.9 bpm , 1,512 gal's 15% Acid, Pump 21,504 gal Slickwater Pre-Pad, Pump 30,996 gal Slickwater gel Pad, Pump 30,996 gal Slickwater w/ 29,000 lbs of 40/70 white Sand ,Pump 32,592 gal Slickwater w/ 41,460 lbs of 40/70 White Sand, Pump 58,464 gal Slickwater w/ 165080 lbs of 20/40 White Sand, Pump 10,332 gal Slickwater Flush. Max rate= 71.6 bpm, Avg rate= 70.0 bpm, Max psi= 7.124 psi, Avg psi= 5,115 psi, ISIP= 3,051 psi. FG= .75 Total load to recover (186,396) GAL'S

12/14/14

SAU 320 LH

C&J COIL 2 3/8 UNIT # 30

WOCS: CC MAXWELL/CHUCK MOORE

ENGINEER: ANDREW WHELAN

ACTIVITY:

08:00 AOL/HELD SAFETY MEETING/WAITING ON GLOBE TO SET TANKS AND TRANSFER WATER

10:00 WE ARE SPOTTING EQUIPMENT AND STANDING UP INJECTOR HEAD ONLY. WIND IS TOO HIGH TO MAKE SAFE LIFT. WILL RESTART RIG UP AT 6:30 AM TOMORROW MORNING.

12/15/14

SAU 320 LH

C&J COIL 2 3/8 UNIT # 30

WOCS: CC MAXWELL/CHUCK MOORE

ENGINEER: ANDREW WHELAN

BHA: 22 MIN

BPV: 2.88

JARS: 2.88

DISCONNECT: 2.88

CIRCULATING SUB: 2.88

HYDRO PULL: 2.88

XTREME MOTOR: 2.88

CROSS OVER: 2.88

VERAL BIT: 4.625

ACTIVITY:

06:30 AOL/SAFETY MEETING.

07:00 CONT TO RIG UP

07:30 PUT ON BHA AND TEST AT SURFACE= 4 BBLs AT 3500 PSI

09:30 ON WELL PRESSURE TEST TO 8500 PSI

09:50 WELL HAS 1000 PSI ON IT/OPEN WELL RIH

12:00 TAG PLUG # 1/DEPTH=10175/CP=4300/WH=950/PUMP IN=4.3 BBL/OUT=4.7 BBLs/DT= 8 MIN

12:42 TAG PLUG # 2/DEPTH=10359/CP=4100/WH=900/PUMP IN=4.3 BBL/OUT= 4.7 BBLs/

DT= 50 MIN

14:10 TAG PLUG # 3/DEPTH= 10549/CP=4600/WH=800/PUMP IN=4.5/OUT=5/DT=38 MIN

15:16 TAG PLUG# 4 /DEPTH=10733/CP=4600/WH=950/PUMP IN= 4.5 BBL/OUT=5 BBL/

DT= 22 MIN

15:50 TAG PLUG # 5/DEPTH= 10927/CP=4600/WH=850/PUMP IN= 4.5 BBL/OUT= 5 BBL/

DT= 35 MIN

16:56 TAG PLUG # 6/DEPTH=11120/CP=4500/WH=1000/PUMP IN=4.5 BBL/OUT=5 BBL/

DT=7 MIN

17:17 TAG PLUG # 7/DEPTH=11308/CP=5000/WH=800/PUMP IN= 4.5 BBL/OUT=5 BBL/

DT=17 MIN

17:57 TAG PLUG # 8/DEPTH=11501/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL/

DT=15 MIN

18:35 TAG PLUG # 9/DEPTH=11690/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL/

DT=20 MIN

20:10 TAG PLUG # 10/DEPTH=11878/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL

SHORT TRIP THREW HEEL

12/16/14

SAU 320 LH

C&J COIL 2 3/8 UNIT # 30

WOCS: CC MAXWELL/CHUCK MOORE

ENGINEER: ANDREW WHELAN

00:45 TAG PLUG # 10/DEPTH=11,891/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL/

DT=30 MIN 10 bbl. Sweep

02:12 TAG PLUG # 11/DEPTH=12,063/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL/

DT=10 MIN 10 bbl. Sweep

02:58 TAG PLUG # 12/DEPTH=11690/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL/

DT=21 MIN 10 bbl. sweep

03:41 TAG PLUG # 13/DEPTH=12441/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL/

DT=15 MIN 10 bbl. sweep

04:27 TAG PLUG # 14/DEPTH=12,634/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL/

DT=36 MIN 10 bbl. Sweep

05:19 TAG PLUG # 15/DEPTH=12,819/CP=5000/WH=800/PUMP IN=4.5BBL/OUT=5 BBL/

DT=25 MIN 10 bbl. Sweep

06:15 tag plug # 16/DEPTH=13008/CP=5000/WH= 900/PUMP IN= 4.5 BBL/OUT/5 BBL

DT= 15 MIN

06:30 -07:00 SAFETY MEETING AND CREW CHANGE

07:05 TAG PLUG # 17/DEPTH=13199/CP=5000/WH=900/PUMP IN= 4.5 BBL/OUT=5 BBLS

DT= 20 MIN

07:50 TAG PLUG # 18/DEPTH=13388/CP=4500/WH=800/PUMP IN=4.5 BBL/OUT= 5 BBL/

DT=23 MIN

08:27 TAG PLUG # 19/DEPTH=13580/CP=4500/WH=800/PUMP IN=4.5 BBL/OUT=5 BBL/ WE WILL DO A MOTOR AND BIT TRIP TO SURFACE. WE WILL CHANGE BHA MOTOR AND PUT ON A NEW 4.625 VERAL BIT. THEN CONTINUE MILLING OPERATIONS.

10:05 CONTINUE TO POOH TO CHANGE MOTOR AND BIT/DEPTH= 11340/WH= 1000

12:45 ON SURFACE/WELL SHUT IN/ CHANGE MOTOR AND INSTALL NEW 4.625 VERAL BIT

13:35 FUNCTION TEST BHA AT SURFACE/TEST AT 4 BBLs AND 3600 PSI.

13:40 BACK ON WELL/PRESSURE TEST STACK

14:00 OPEN WELL RIH

16:00 CONT TO RIH/DEPTH=11900

16:35 TAG PLUG # 19/DEPTH=13591/CP=4200/WH=800/PUMP IN 4.5 BBL/OUT=5 BBL/

DT= 10 MIN

16:55 TAG PLUG # 20/DEPTH=13744/CP=4300/WH=800/PUMP IN=4.5 BBL/OUT= 5 BBL/

DT= 10 MIN

17:34 TAG PLUG # 21/DEPTH=13965/CP=4800/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/

DT= 12 MIN

18:10 TAG PLUG # 22/DEPTH=14,155/CP=4700/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/

DT=10 MIN

18:48 TAG PLUG # 23/DEPTH=14,345/CP=4300/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/

DT= 20 MIN

19:36 TAG PLUG # 24/DEPTH=14,536/CP=4500/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/

DT= 20 MIN

20:58 TAG PLUG # 25/DEPTH=14,722/CP=4700/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/

DT= 32 MIN

22:04 TAG PLUG # 26/DEPTH=14,919/CP=4500/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/

DT=16 MIN

23:00 TAG PLUG # 27/DEPTH=15,103/CP=4800/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/

SHORT TRIP TO HEEL

12/17/14

SAU 320 LH

C&J COIL 2 3/8 UNIT # 30

WOCS: CC MAXWELL/CHUCK MOORE

ENGINEER: ANDREW WHELAN

04:04 RE TAG PLUG # 27/DEPTH=15,096/CP=4700/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/DT=24 MIN

04:48 TAG PLUG # 28/DEPTH=15,287/CP=4500/WH=750/PUMP IN= 4.5 BBL/OUT= 5 BBL/DT=28 MIN

05:45 TAG PLUG # 29/DEPTH=15476/CP=4800/WH=750/PUMP IN 4.5 BBL/OUT 5 BBL/DT= 45 MIN

07:05 TAG PLUG # 30/DEPTH=15665/CP=4800/WH=750/PUMP IN=4.5 BBL/OUT=5 BBL/DT=50 MIN

09:27 TAG PLUG # 31/DEPTH=15856/CP=4600/WH=700/PUMP IN=4.5 BBL/OUT= 5 BBL/DT=54 MIN

11:00 TAG PLUG # 32/DEPTH= 16047/CP=4800/WH=700/PUMP IN = 4.5 BBL/OUT= 5 BBL/DT= 55 MIN

13:09 TAG PLUG # 33/DEPTH=16236/CP=4200/WH=700/PUMP IN=4.5 BBL/OUT=5 BBL/DT= 45 MIN. WE HAVE STARTED FIGHTING FRICTION, RAISED POP UP TO .5/10 BBL AND STARTED BECKA LUBE AT .25/10 BBL. WE ARE STILL MAKING FOOTAGE, JUST HAS SLOWED BETWEEN PLUGS AND DRILL TIMES. WE RE GOING AFTER LAST PLUG TO MILL UP.

15:15 TAG PLUG # 34/DEPTH=16422/CP=5200/WH=700/PUMP IN=4.5 BBL/OUT=5 BBL/DT= 40 MIN WE ARE NOW GOING TO TAG PLUG # 35 AND CIRCULATE A 20 / 10/ 20 BOTTOMS UP. THEN WE WILL POOH TO RDMO

17:10 TAG PLUG # 35/DEPTH=16482 . PU 50 FT SENT 10/20/10 SWEEP.