Chappell, Michelle

From: Melissa Luke <Melissa.Luke@qepres.com>
Sent: Monday, August 15, 2016 3:03 PM
To: C.R. Salinas; Kelly Hamden; Lindsey Shoulders; Melissa Luke; Scott Peterson; OGRegulatory
Subject: First Sales Notification: University 7-1726 S 06SS, S 07SS, and S 08SS
Attachments: University 7-1726 S 06SS Perf Sheet.xlsx; University 7-1726 S 06SS Crescent Final Surveys 7-7-16.xlsx; University 7-1726 S 06SS Crescent Final Surveys 7-7-16.pdf; University 7-1726 S 07SS Perf Sheet.xlsx; University 7-1726 S 07SS Crescent Final Surveys 7-26-16.xlsx; University 7-1726 S 07SS Crescent Final Surveys 6-27-16.pdf; University 7-1726 S 08SS Perf Sheet.xlsx; University 7-1726 S 08SS Crescent Final Surveys 6-14-16.pdf; University 7-1726 S 08SS Crescent Final Surveys 6-14-16.xlsx

Hello –

Please note that the above wells went on production on **08/13/2016**. Please find the attached directional surveys and perf sheets.

The **University 7-1726 S 06SS** was completed as an oil well.

It was perforated from 9,633'-16,903'

Both oil and gas are to be reported.

The **University 7-1726 S 07SS** was completed as an oil well

It was perforated from 9,475'-16,822'

Both oil and gas are to be reported.

The **University 7-1726 S 08SS** was completed as an oil well

It was perforated from 9,643'-16,995'

Both oil and gas are to be reported.

Toe Sleeve		16,903		**Well:**	University 7
Top Perf		9,633	Deepest of red box depths	**Prop/Ft:**	**1,400**
Stgs=	32	7,270	lat length	**Prop/Stg:**	**318,048**
Dist btw Perfs		58			2 ft guns or
Dist btw Perf/Plug		29		**Stage Spacing:**	234

Stage 1	Plug	-		**Stage 2**	Plug	16,854	
	RSI	16,903 -	16,885		Perf 1	16,825 -	16,823
		16,961	16,944		Perf 2	16,766 -	16,764
					Perf 3	16,708 -	16,706
					Perf 4	16,649 -	16,647
Stage 4	Plug	16,386		**Stage 5**	Plug	16,152	
	Perf 1	16,357 -	16,355		Perf 1	16,123 -	16,121
	Perf 2	16,299 -	16,297		Perf 2	16,065 -	16,063
	Perf 3	16,240 -	16,238		Perf 3	16,006 -	16,004
	Perf 4	16,182 -	16,180		Perf 4	15,948 -	15,946
Stage 7	Plug	15,685		**Stage 8**	Plug	15,451	
	Perf 1	15,656 -	15,654		Perf 1	15,422 -	15,420
	Perf 2	15,597 -	15,595		Perf 2	15,363 -	15,361
	Perf 3	15,539 -	15,537		Perf 3	15,305 -	15,303
	Perf 4	15,480 -	15,478		Perf 4	15,246 -	15,244
Stage 10	Plug	14,983		**Stage 11**	Plug	14,750	
	Perf 1	14,954 -	14,952		Perf 1	14,720 -	14,718
	Perf 2	14,896 -	14,894		Perf 2	14,662 -	14,660
	Perf 3	14,837 -	14,835		Perf 3	14,603 -	14,601
	Perf 4	14,779 -	14,777		Perf 4	14,545 -	14,543
Stage 13	Plug	14,282		**Stage 14**	Plug	14,048	
	Perf 1	14,253 -	14,251		Perf 1	14,019 -	14,017
	Perf 2	14,194 -	14,192		Perf 2	13,960 -	13,958
	Perf 3	14,136 -	14,134		Perf 3	13,902 -	13,900
	Perf 4	14,077 -	14,075		Perf 4	13,844 -	13,842
Stage 16	Plug	13,581		**Stage 17**	Plug	13,347	
	Perf 1	13,551 -	13,549		Perf 1	13,318 -	13,316
	Perf 2	13,493 -	13,491		Perf 2	13,259 -	13,257
	Perf 3	13,434 -	13,432		Perf 3	13,201 -	13,199
	Perf 4	13,376 -	13,374		Perf 4	13,142 -	13,140
Stage 19	Plug	12,879		**Stage 20**	Plug	12,645	
	Perf 1	12,850 -	12,848		Perf 1	12,616 -	12,614
	Perf 2	12,791 -	12,789		Perf 2	12,558 -	12,556
	Perf 3	12,733 -	12,731		Perf 3	12,499 -	12,497
	Perf 4	12,675 -	12,673		Perf 4	12,441 -	12,439
Stage 22	Plug	12,178		**Stage 23**	Plug	11,944	
	Perf 1	12,148 -	12,146		Perf 1	11,915 -	11,913
	Perf 2	12,090 -	12,088		Perf 2	11,856 -	11,854
	Perf 3	12,032 -	12,030		Perf 3	11,798 -	11,796

	Perf 4	11,973	-	11,971		Perf 4	11,739	-	11,737
Stage 25	Plug	11,476			**Stage 26**	Plug	11,242		
	Perf 1	11,447	-	11,445		Perf 1	11,213	-	11,211
	Perf 2	11,389	-	11,387		Perf 2	11,155	-	11,153
	Perf 3	11,330	-	11,328		Perf 3	11,096	-	11,094
	Perf 4	11,272	-	11,270		Perf 4	11,038	-	11,036
Stage 28	Plug	10,775			**Stage 29**	Plug	10,541		
	Perf 1	10,746	-	10,744		Perf 1	10,512	-	10,510
	Perf 2	10,687	-	10,685		Perf 2	10,453	-	10,451
	Perf 3	10,629	-	10,627		Perf 3	10,395	-	10,393
	Perf 4	10,570	-	10,568		Perf 4	10,336	-	10,334
Stage 31	Plug	10,073			**Stage 32**	Plug	9,840		
	Perf 1	10,044	-	10,042		Perf 1	9,810	-	9,808
	Perf 2	9,986	-	9,984		Perf 2	9,752	-	9,750
	Perf 3	9,927	-	9,925		Perf 3	9,693	-	9,691
	Perf 4	9,869	-	9,867		Perf 4	9,635	-	9,633

7-1726 S 06SS
lbs/ft
lbs/stg
ı the deepest custer

				Holes
Stage 3	Plug	16,620		
	Perf 1	16,591 -	16,589	12
	Perf 2	16,532 -	16,530	12
	Perf 3	16,474 -	16,472	12
	Perf 4	16,415 -	16,413	12
Stage 6	Plug	15,919		
	Perf 1	15,889 -	15,887	
	Perf 2	15,831 -	15,829	
	Perf 3	15,773 -	15,771	
	Perf 4	15,714 -	15,712	
Stage 9	Plug	15,217		
	Perf 1	15,188 -	15,186	
	Perf 2	15,130 -	15,128	
	Perf 3	15,071 -	15,069	
	Perf 4	15,013 -	15,011	
Stage 12	Plug	14,516		
	Perf 1	14,487 -	14,485	
	Perf 2	14,428 -	14,426	
	Perf 3	14,370 -	14,368	
	Perf 4	14,311 -	14,309	
Stage 15	Plug	13,814		
	Perf 1	13,785 -	13,783	
	Perf 2	13,727 -	13,725	
	Perf 3	13,668 -	13,666	
	Perf 4	13,610 -	13,608	
Stage 18	Plug	13,113		
	Perf 1	13,084 -	13,082	
	Perf 2	13,025 -	13,023	
	Perf 3	12,967 -	12,965	
	Perf 4	12,908 -	12,906	
Stage 21	Plug	12,411		
	Perf 1	12,382 -	12,380	
	Perf 2	12,324 -	12,322	
	Perf 3	12,265 -	12,263	
	Perf 4	12,207 -	12,205	
Stage 24	Plug	11,710		
	Perf 1	11,681 -	11,679	
	Perf 2	11,622 -	11,620	
	Perf 3	11,564 -	11,562	

		Old design
		6
		6
		6
1.302083333	bbls/perf (50 BPM)	6
1.5625	bbls/perf (60 BPM)	6
1.822916667	bbls/perf (70 BPM)	6

Formation Top	9,619
70° @	9,633
Perf Hardline	
Perf Hardline + 10'	10

	Perf 4	11,505	-	11,503
Stage 27	Plug	11,009		
	Perf 1	10,979	-	10,977
	Perf 2	10,921	-	10,919
	Perf 3	10,863	-	10,861
	Perf 4	10,804	-	10,802
Stage 30	Plug	10,307		
	Perf 1	10,278	-	10,276
	Perf 2	10,220	-	10,218
	Perf 3	10,161	-	10,159
	Perf 4	10,103	-	10,101

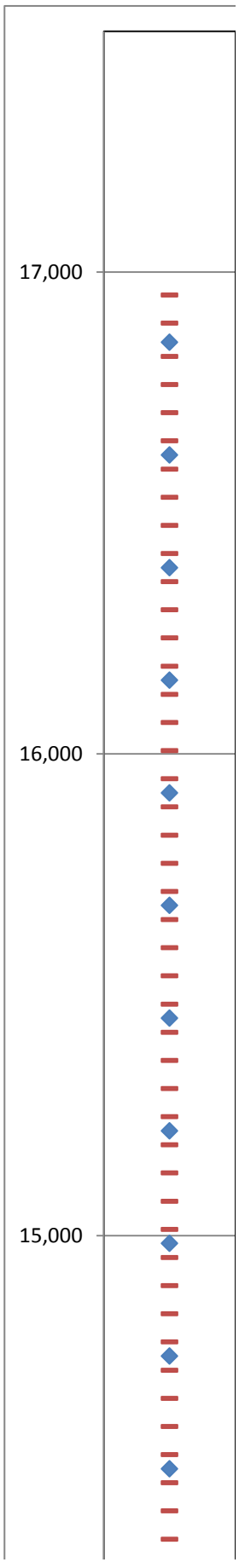
Goal seek to D2 by changing D4

← Goal Seek to D2 value by modifying D4

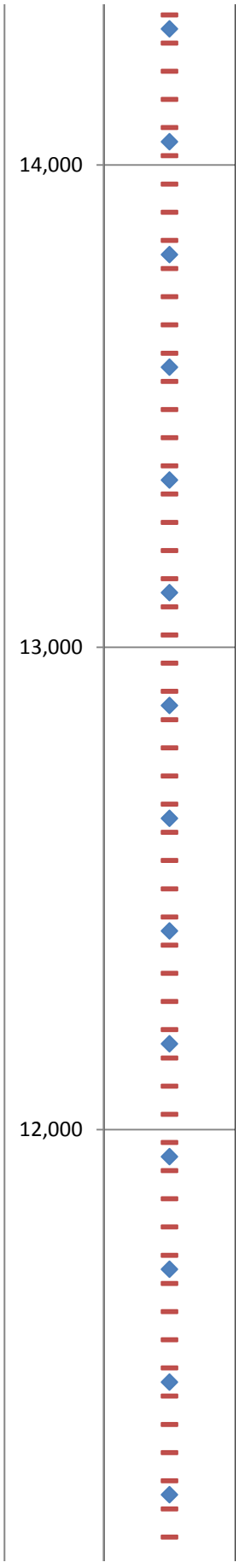
		Current Design		
		12		
		12		
		12		
1.736111	bbls/perf (50 BP	12	1.666667	bbls/perf 80 BPM)
2.083333	bbls/perf (60 BP	6	1.875	bbls/perf 90 BPM)
2.430556	bbls/perf (70 BP	6	2.083333	bbls/perf (100 BPM)

MD	Choose the deeper of
MD	these for Top of Formation (D2)
MD	*Input to D2 Automatically*
MD	

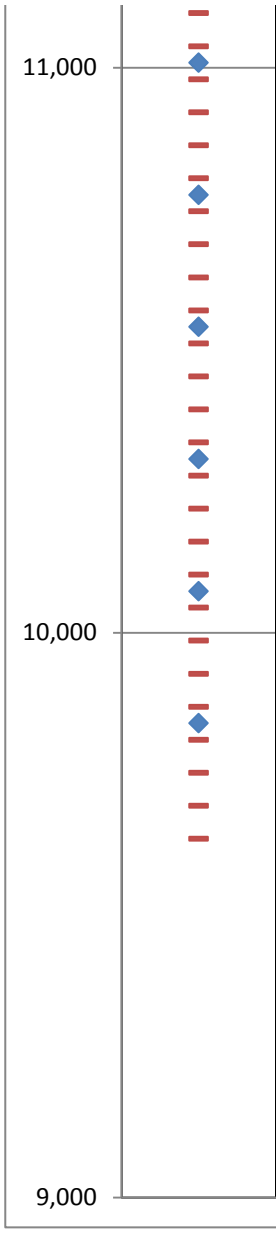
	Stage	Plug Depth MD (ft)	Perfs
1	1	16,854	16,894
1	2	16,620	16,952
1	3	16,386	16,825
1	4	16,152	16,766
1	5	15,919	16,708
1	6	15,685	16,649
1	7	15,451	16,591
1	8	15,217	16,532
1	9	14,983	16,474
1	10	14,750	16,415
1	11	14,516	16,357
1	12	14,282	16,299
1	13	14,048	16,240
1	14	13,814	16,182
1	15	13,581	16,123
1	16	13,347	16,065
1	17	13,113	16,006
1	18	12,879	15,948
1	19	12,645	15,889
1	20	12,411	15,831
1	21	12,178	15,773
1	22	11,944	15,714
1	23	11,710	15,656
1	24	11,476	15,597
1	25	11,242	15,539
1	26	11,009	15,480
1	27	10,775	15,422
1	28	10,541	15,363
1	29	10,307	15,305
1	30	10,073	15,246
1	31	9,840	15,188
1	32	0	15,130
1	33	0	15,071
1	34	0	15,013
1	35	0	14,954
1	36		14,896
1	37		14,837
1	38		14,779
1	39		14,720
1	40		14,662
1	41		14,603
1	42		14,545
1	43		14,487
1	44		14,428
1	45		14,370
1			14,311



1	14,253
1	14,194
1	14,136
1	14,077
1	14,019
1	13,960
1	13,902
1	13,844
1	13,785
1	13,727
1	13,668
1	13,610
1	13,551
1	13,493
1	13,434
1	13,376
1	13,318
1	13,259
1	13,201
1	13,142
1	13,084
1	13,025
1	12,967
1	12,908
1	12,850
1	12,791
1	12,733
1	12,675
1	12,616
1	12,558
1	12,499
1	12,441
1	12,382
1	12,324
1	12,265
1	12,207
1	12,148
1	12,090
1	12,032
1	11,973
1	11,915
1	11,856
1	11,798
1	11,739
1	11,681
1	11,622
1	11,564



1	11,505
1	11,447
1	11,389
1	11,330
1	11,272
1	11,213
1	11,155
1	11,096
1	11,038
1	10,979
1	10,921
1	10,863
1	10,804
1	10,746
1	10,687
1	10,629
1	10,570
1	10,512
1	10,453
1	10,395
1	10,336
1	10,278
1	10,220
1	10,161
1	10,103
1	10,044
1	9,986
1	9,927
1	9,869
1	9,810
1	9,752
1	9,693
1	9,635
	0
	0
	0
	0



MD (ft)	Inc (°)	Azi (°)	TVD (usft)	N/S (ft)	E/W (ft)	Dogleg (°/100ft)
8,871	0.6	179.3	8,849	322	116	0
8,920	0.3	203.7	8,898	322	116	1
8,951	1.7	172.7	8,929	321	116	5
8,983	6.3	167.0	8,961	319	116	14
9,015	10.7	169.0	8,993	314	117	14
9,046	15.2	167.8	9,023	308	118	15
9,078	18.8	169.9	9,053	298	120	11
9,109	22.0	168.4	9,083	288	122	11
9,141	24.8	166.3	9,112	275	125	9
9,172	28.0	166.0	9,140	262	128	10
9,204	31.1	166.2	9,168	247	132	10
9,235	33.9	167.8	9,194	231	136	9
9,267	36.5	169.3	9,220	212	140	9
9,298	39.1	169.2	9,244	194	143	8
9,329	41.8	169.5	9,268	174	147	9
9,361	44.7	169.6	9,291	153	151	9
9,392	46.7	169.0	9,313	131	155	7
9,424	48.3	167.1	9,334	108	160	7
9,455	51.3	164.7	9,354	85	166	11
9,487	54.7	163.6	9,374	60	173	11
9,518	57.4	163.1	9,391	35	180	9
9,550	60.6	163.9	9,408	9	188	10
9,582	64.8	164.4	9,422	-18	196	13
9,614	68.2	165.3	9,435	-47	203	11
9,645	71.1	166.3	9,446	-75	210	10
9,677	73.7	166.9	9,455	-104	217	8
9,709	77.4	167.3	9,463	-135	224	12
9,740	81.3	168.1	9,469	-164	231	13
9,771	84.4	168.0	9,473	-195	237	10
9,803	86.2	167.6	9,476	-226	244	6
9,834	86.1	166.9	9,478	-256	251	2
9,866	86.7	167.1	9,480	-287	258	2
9,929	88.3	167.3	9,482	-348	272	2
10,024	88.9	167.7	9,485	-441	292	1
10,119	89.9	167.7	9,486	-534	313	1
10,214	90.2	167.7	9,486	-627	333	0
10,308	89.8	166.8	9,486	-718	354	1
10,403	89.9	166.7	9,486	-811	375	0
10,497	90.0	167.7	9,486	-903	396	1
10,591	90.6	168.0	9,485	-994	416	1
10,686	89.9	167.0	9,485	-1,087	436	1
10,781	88.8	165.4	9,486	-1,179	459	2
10,876	90.3	167.4	9,487	-1,272	482	3
10,971	90.8	169.5	9,486	-1,365	501	2
11,065	91.1	169.3	9,484	-1,457	518	0
11,160	91.3	168.7	9,482	-1,550	536	1

11,254	91.0	167.3	9,480	-1,642	556	2
11,350	90.4	165.6	9,479	-1,736	578	2
11,445	90.3	168.1	9,479	-1,828	600	3
11,540	90.4	168.0	9,478	-1,921	619	0
11,635	89.0	166.1	9,479	-2,014	641	2
11,730	89.3	167.3	9,480	-2,106	663	1
11,824	88.6	166.8	9,482	-2,198	684	1
11,919	91.2	169.6	9,482	-2,291	703	4
12,014	91.7	169.5	9,479	-2,384	720	0
12,109	91.1	169.6	9,477	-2,477	738	1
12,204	91.1	169.3	9,475	-2,571	755	0
12,298	90.7	168.6	9,474	-2,663	773	1
12,393	90.3	166.0	9,473	-2,756	794	3
12,487	88.9	165.5	9,474	-2,847	817	2
12,581	89.2	167.7	9,475	-2,938	839	2
12,677	89.9	167.3	9,476	-3,032	859	1
12,772	90.1	167.8	9,476	-3,125	880	1
12,866	90.0	168.3	9,476	-3,217	899	1
12,961	89.8	168.4	9,476	-3,310	918	0
13,055	89.6	168.5	9,477	-3,402	937	0
13,150	90.1	169.8	9,477	-3,495	955	2
13,244	90.1	169.5	9,477	-3,588	972	0
13,339	89.8	169.2	9,477	-3,681	990	0
13,434	88.4	167.7	9,478	-3,774	1,009	2
13,529	87.7	167.5	9,482	-3,867	1,029	1
13,625	88.9	166.7	9,484	-3,960	1,051	1
13,719	88.4	165.8	9,487	-4,052	1,073	1
13,814	90.3	166.7	9,488	-4,144	1,096	2
13,908	91.0	167.7	9,487	-4,235	1,116	1
14,003	90.1	165.4	9,486	-4,328	1,139	3
14,098	89.5	166.2	9,486	-4,420	1,162	1
14,192	90.9	166.7	9,486	-4,511	1,184	2
14,287	90.6	166.2	9,485	-4,604	1,206	1
14,382	90.3	165.3	9,484	-4,696	1,230	1
14,477	89.9	166.1	9,484	-4,788	1,253	1
14,572	90.1	167.2	9,484	-4,880	1,275	1
14,667	90.4	167.3	9,483	-4,973	1,296	0
14,762	90.6	167.2	9,482	-5,066	1,317	0
14,857	87.9	165.7	9,484	-5,158	1,339	3
14,952	89.7	166.6	9,486	-5,250	1,362	2
15,047	90.3	168.6	9,486	-5,343	1,382	2
15,141	90.1	169.1	9,485	-5,435	1,400	1
15,236	89.0	167.6	9,486	-5,528	1,420	2
15,331	89.6	168.3	9,487	-5,621	1,440	1
15,425	90.2	169.7	9,487	-5,713	1,457	2
15,519	89.5	169.2	9,488	-5,806	1,475	1
15,614	90.5	170.2	9,488	-5,899	1,492	2

15,708	88.7	168.0	9,488	-5,991	1,509	3
15,803	89.0	168.2	9,490	-6,084	1,529	0
15,897	88.7	167.3	9,492	-6,176	1,549	1
15,992	89.7	167.0	9,493	-6,269	1,570	1
16,087	89.2	167.7	9,494	-6,362	1,591	1
16,182	89.3	169.0	9,495	-6,455	1,610	1
16,276	90.0	169.5	9,496	-6,547	1,628	1
16,371	91.5	170.2	9,495	-6,640	1,644	2
16,465	89.1	167.9	9,494	-6,733	1,662	3
16,560	89.7	167.1	9,495	-6,825	1,683	1
16,655	88.9	166.7	9,496	-6,918	1,704	1
16,750	89.0	165.3	9,498	-7,010	1,727	1
16,844	91.2	165.4	9,498	-7,101	1,751	2
16,939	89.0	162.4	9,498	-7,192	1,778	4
17,018	88.8	161.3	9,499	-7,267	1,802	2
17,078	88.8	161.3	9,501	-7,324	1,822	0