

FORGE Energy
UL 21 Bighorn 4H
API Number: 42-495-34008

03/22/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Directions: From Wink and Hwy.115 and FM 1232, turn northwest on FM 1232, go 1.5 miles to Cr. 201, turn west on Cr. 201 and go 6.8 miles, will be XTO and Oxy signs, turn south for 3.0 miles, will be Y's in road stay south, will be power lines running west and east, turn east on power lines right of way, go 1.2 miles, flags will be on left or north.

12/01/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Location is cleared and leveled, pits are 30% cleared

12/02/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Pad is cleared and leveled, pits are cleared, dozer is in caliche pit pushing up caliche

12/05/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 70% of caliche is hauled

12/06/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Hauling caliche is complete, cellar is installed, pit construction is 5% complete

12/07/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Pad is 80% complete, pits are 50% complete, shutdown early due to rain.

12/08/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Pad construction is 80% complete, shutdown pad construction due to rain.
Pit construction is 85% complete

12/12/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Construction is complete

12/20/2017

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Set 80'X20" conductor, 70'X16" mouse hole, lined pits, installed 4 strands of barb wire around pits, started fresh and brine water to pits.

01/09/2018

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Checked pits for leaks and tears

01/25/2018

Rig Name:

Depth = 0.0 Progress = 0.0

06:00 RIGGING DOWN WAITING ON TRUCKS

08:00 SAFETY MEETING WITH CREWS & TRUCKING

08:30 RIG DOWN & MOVE BACK YARD; GENERATORS, MUD PUMPS, MUD PITS, VFD, DIESEL TANK, ECT.

15:00 LOWER DERRICK @ 3:00; SPLIT DERRICK @ 4:00; LOWER SUB @ 5:00; REMOVE CENTER STEEL & SPLIT SUB TILL 6:30 (DARK)(CLEANING DERRICK & SUB)

18:30 TRUCKING SHUT DOWN @ 6:30 DUE TO NOT MOVING EQUIPMENT AFTER DARK; RIG CREWS STILL RIGGING UP ELECTRIC LINES; AIR LINES; MUD PITS; ECT; (THIRD PARTY CLEANING DERRICK & SUB THREW OUT THE NIGHT)

01/26/2018

Rig Name:

Depth = 0.0 Progress = 0.0

06:00 RIG UP WAITING ON TRUCKS
08:00 SAFETY MTG W/ CREWS & TRUCKING
08:30 MOVE DERRICK;SUBBASE;MUD BOAT;DRAWWORKS;DRILLERS CABIN; ECT
11:30 SET IN DERRICK;SUBBASE;MUD BOAT;DRAWWORKS;DRILLERS CABIN;ECT
13:30 PIN DERRICK; PIN CENTER STEEL IN SUBBASE;RIG UP SAME; RAISE SUBBASE @ 15:00;RAISE DRILLERS CABIN @ 15:30;RAISE DERRICK @ 16:00; SET IN CATWALK & MISC; (RELEASE TRUCKS @ 6:00 PM)
17:00 RIG UP ELECTRICAL,AIR LINES,DRAWWORKS,RIG FLOOR;CATWALK;PLUG IN D-FUB ARM PLUGS; INSTALL GROUND RODS; ELECTRICIANS FUNCTION TEST ALL EQUIPMENT;
22:30 SPOOL UP DRAW WORKS @ 22:30; UNPIN TDS RIG UP BELLS & ELEVATORS; 2 POINT CALIBRATION; RIG UP STANDPIPE,KILL LINES,MCC HOUSE,TRIP TANK LINES, VENT LINES & GAS BUSTER; FILLING UP EYE WASH STATIONS

01/27/2018

Rig Name:

Depth = 0.0 Progress = 0.0

06:00 ACCEPT RIG ON DAY WORK @ 06:00 01/26/2018; CHANGING LINERS & SWABS IN MUD PUMPS FROM 5" TO 6"; H&P BOP TECHS CHANGING OUT VARIABLE RAMS & RIG UP HYDRAULIC LINES ; R/U CUTTINGS TROUGH ON SHALE SHAKERS;ORGANIZE 3RD PARTY EQUIPMENT ON LOCATIION;C/O SAVER SUB ON TOP DRIVE
16:30 CONTINUE CHANGING OUT 5" LINERS & SWABS TO 6"ON MUD PUMPS;TEST CHOKE MANIFOLD ;INSTALL TEST JOINT IN BOP SO BATTLE CAN STUMP TEST BOP @ 250/LOW F/10 MINS. 5K/HIGH F/10 MINS. ANNULAR 250/LOW F/10 MINS 2500/HIGH F/10 MINS;TEST FLOOR VALVES & BACK TO STANDPIPE VALVE; RIG UP PVC & TRASH PUMPS IN BACK YARD
00:30 WHEN MECHANICS WHERE REPAIRING SEALS & GASKETS ON BULL WHEEL THEY REALIZED THAT THE BEARING ARE DAMAGED BEYOND REPAIR ON THE GEAR END; H&P DECIDED TO CHANGE THE WHOLE GEAR END OUT; ALL HANDS HAVE STARTED TEARING DOWN THE PUMP; REMOVING THE THREE MODULAR THE PULSATING DAMPNER; TO HAVE GEAR END READY TO SWAP OUT BY 14:00 TODAY;

01/28/2018

Rig Name:

Depth = 0.0 Progress = 0.0

06:00 CLEAN & PREP WATERMELON;MODULES;AND MISC. PARTS ON MUD PUMP #1 FOR INSTALL OF GEAR END
13:00 CONT. TO RIG UP BACKYARD;DRESS OUT SHAKERS;
14:00 PJSM W/ CREW & CRANE CREW;SWAP OUT GEAR END ON MUD PUMP #1;REASSEMBLE MUD PUMP

01/29/2018

Rig Name: H&P 602

Depth = 720.0 Progress = 615.0

06:00 FILL MUD PUMP W/ GEAR OIL;INSTALL LINER WASHERS;VIBRATOR HOSE;
09:00 INSTALL REMAINING PVC IN BACKYARD;TRASH PUMPS;STRAP BHA;FILL MUD PITS W/ FRESH WATER AND REPAIR LEAKS;READY RIG FLOOR
16:00 PJSM W/ CREW; TRRC JOB # 117512; START P/U BHA #1 CONSISTING OF 17 1/2" ULTERRA CF616 PDC BIT JETTED WITH TFA .893, BIT SUB, SHOCK SUB, TRUE SHOT MWD SURVEY TOOL, 17 1/4" IBS, 1-8" DC, 17 1/4" IBS, 2-8" DC'S, TAG BOTTOM @ 105'. TEST TRUE SHOT. TESTED GOOD.
21:00 ROT DRLG F/ 105' T/ 300' = 195' @ 65'FPH, 5-15-WOB, 40-ROP, 420-GPM, 500 PUMP PSI, 8K TQ ON BTM, 2KTQ OFF BTM, 62K PU, 60K SO, RW 60, PUMPED 20 BBL HI-VIS/PAPER SWEEPS EVERY 90',
00:00 ROT DRLG F/ 300' T/ 570' = 270' @ 67.5'FPH, 10-15-WOB, 70-ROP, 650-GPM, 1050 PUMP PSI, 12K TQ ON BTM, 2KTQ OFF BTM, 81K PU, 80K SO, RW 80, PUMPED 20 BBL HI-VIS/PAPER SWEEPS EVERY 90';
04:00 ROT DRLG F/ 570' T/ 720' = 150' @ 75'FPH, 15-30-WOB, 70-ROP, 650-GPM, 1150 PUMP PSI, 12K TQ ON BTM, 2KTQ OFF BTM, 96K PU, 95K SO, RW 95, PUMPED 20 BBL HI-VIS/PAPER SWEEPS EVERY 90';

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
99.0	99.00	0.60	38.20	0.26	1.32	0.26	0.09
130.0	130.00	0.30	234.20	0.34	2.88	0.34	0.12
161.0	161.00	0.70	21.30	0.47	3.12	0.47	0.12
276.0	275.99	1.00	153.20	0.23	1.35	0.23	0.83
334.0	333.98	1.30	139.90	-0.73	0.69	-0.73	1.48
393.0	392.97	1.10	155.40	-1.76	0.64	-1.76	2.15
451.0	450.96	1.20	146.10	-2.77	0.36	-2.77	2.72
507.0	506.95	1.40	165.30	-3.92	0.85	-3.92	3.22
569.0	568.93	1.30	152.80	-5.28	0.50	-5.28	3.73
659.0	658.89	1.90	160.70	-7.60	0.71	-7.60	4.69

01/30/2018

Rig Name: H&P 602

Depth = 822.0 Progress = 102.0

06:00 ROT DRLG F/ 720' T/ 822' TD = 102' @ 41' FPH, 15-30-WOB, 70-ROP, 650-GPM, 1150 PUMP PSI, 12K TQ ON BTM, 2KTQ OFF BTM, 105K PU, 95K SO, RW 103K, PUMPED 20 BBL HI-VIS/PAPER SWEEPS EVERY 90';

08:30 CIRC 2 BTMS @ 650 GPM;PUMP 2 HIGH VIS SWEEPS

09:00 TOOH F/ 822' T/ BHA. L/D BHA GRADE BIT AT INNER 1 OUTER 1

12:00 PJSM RIG CREW; BUTCHS CASING CREW & C.MAN; CLEAN FLOOR & ORGANIZE & R/U CASING CREW

12:30 RUN 13 3/8" CASING AS FOLLOWS: 1 TEXAS PATTERN SHOE', 1 JT 13 3/8" 68# J-55 BTC, FC, 1 JT 13 3/8" 68# J-55 BTC, THREAD LOCKED SHOE TRACK, PUMPED THROUGH FLOATS, (TEST GOOD), RUN 19 MORE JTS 13 3/8" 68# J-55 BTC CASING, PLACED CENT 10' ABOVE SHOE, 10' ABOVE FC, CENT EVERY 3RD JT T/ SURFACE, TAGGED @ 822', HARD BOTTOM, SHOE @ 822', FC @ 779'.

15:00 CIRC HOLE CLEAN;R/D CASING CREW;HELD PJSM;RIG UP HALLIBURTON

16:00 CEMENT 13 3/8" CSG AS FOLLOWS: PRESSURE TEST LINES TO 2,500 PSI, PUMPED 20 BBL FRESH WATER GEL SPACER, PUMPED 550 SX (186 BBLS) 12.9 PPG LEAD ECONOCEM @ 1.84 YIELD W/ 160% XS PUMPED AT 6 BPM, PUMPED 185 SX (45 BBLS) 14.8 PPG TAIL HALCEM @ 1.348 YIELD W/ 0% XS PUMPED AT 5 BPM, DROPPED NON ROTATING TOP PLUG, PUMPED 120 BBLS OF DISPLACEMENT WITH 8.3# FRESH WATER, SLOWED T/ 3 BPM, BUMPED PLUG 350 PSI, PRESSURED UP 500 PSI OVER T/ 850 PSI, HOLD PRESSURE 5 MINUTES, BLEED OFF; FLOATS HOLDING, 1 BBLS BACK FROM LINES; CIRCULATED 120 BBL CEMENT TO SURFACE, FULL RETURNS THROUGHOUT JOB;

17:00 RIG DOWN HALLIBURTON & FLUSH CONDUCTOR PIPE AND VALVES

18:00 RIG DOWN FLOW LINE, 2 INCH LINES & TURNBUCKLES;

19:30 CUT OFF CONDUCTOR PIPE & RAISE; CUT & DRAIN 13 3/8 CASING; MAKE ROUGH CUT; LAY DOWN CASING & CONDUCTOR PIPE; MAKE FINAL CUT ON CASING & WELD ON WELL HEAD; TEST WELL HEAD T/900 PSI HELD GOOD; (EMPTY PITS, SWAP PVC & TRASH PUMPS TO BRINE, FILL PITS WITH BRINE; BREAK & PICK UP BOP OFF STUMP TEST; CLEAN ALL BOLTS ON SPOOLS & BOP)

01:00 NIPPLE UP BOP; FLOW LINE; 2 INCH LINES & TURNBUCKLES; (TEST BACK TO THE MUD PUMPS)

Vis (s/qt): 28, Dens (lb/gal): 8.40, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
751.0	750.84	1.90	161.30	-10.48	0.02	-10.48	5.68
790.0	789.82	1.90	152.90	-11.67	0.71	-11.67	6.18

01/31/2018

Rig Name: H&P 602

Depth = 2,035.0 Progress = 1213.0

06:00 NIPPLE UP BOP;FLOW LINE;FILL UP LINE;ORBIT VALVE;ROTATING HEAD EQUIPMENT

08:00 INSTALL TEST PLUG IN WELLHEAD;TEST BOP BREAKS AGAINST BLIND RAMS TO 250 PSI LOW AND 5,000 PSI HIGH FOR 5 MINUTES EACH; TEST CHOKE LINE AGAINST MANUAL HCR VALVE TO 250 PSI LOW AND 5,000 PSI HIGH FOR 5 MINUTES EACH; ALL TESTS GOOD; REMOVE TEST PLUG; CLOSE CSG HEAD VALVES AND TEST CASING TO 1,500 PSI FOR 30 MINUTES AGAINST BLIND RAMS; TEST GOOD

10:00 INSTALL WEAR BUSHING

10:30 PUMP READY MIX CEMENT DOWN BACK SIDE TO STABILIZE BOP

12:00 P/U DIRECTIONAL TOOLS; SCRIBE; INSTALL MWD;SURFACE TEST; MAKE UP BIT;P/U 3-IBS;3-8" DC;

16:30 RIG SERVICE

17:00 TIH F/ 217' T/ 762'; (TAG CEMENT)

18:30 DRLG CEMENT & FLOAT EQUIPMENT F/762' T/822'; (FC @ 778' SHOE @ 822')

19:30 ROT DRLG F/822' - T/945' (123' @ 82 FPH). WOB : 15K-20K, TOP DRV RPM: 40; SPP 1500 PSI; GPM: 550; DIFF PSI: 300/400; MUD MTR RPM: 88; TOP DRV TRQ: 3K/9K FT/LBS ON BTM, 2K OFF BTM; PU 117K, SO 117K, ROT: 119K PUMPING 10 BBL, 60 VIS SWEEPS EVERY OTHER CONNECTION

21:00 SLIDE DRILL F/945' T/965';(20' @ 40 FPH) TF:340 M; WOB: 15K; GPM: 800; MRPM: 128; SPP: 2,250 PSI; DIFF: 250 PSI; P/U: 120K; SO: 118K

21:30 ROT DRLG F/965' T/1023' (58' @ 116 FPH). WOB : 15K-25K, TOP DRV RPM: 70/80; SPP 2,350 PSI; GPM: 850; DIFF PSI: 250/500; MUD MTR RPM: 136; TOP DRV TRQ: 3K/9K FT/LBS ON BTM, 2K OFF BTM; PU 120K, SO 118K, ROT: 123K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION

22:00 REPLACE BUSTED HYDROLIC LINE ON TOP DRIVE;

00:00 ROT DRLG F/1023' T/1393' (370' @ 185 FPH). WOB : 15K-25K, TOP DRV RPM: 70/80; SPP 2,600 PSI; GPM: 850; DIFF PSI: 350/650; MUD MTR RPM: 136; TOP DRV TRQ: 8K/12K FT/LBS ON BTM, 2K OFF BTM; PU 122K, SO 120K, ROT: 123K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION

02:00 ROT DRLG F/1393' T/1690' (297' @ 148.5 FPH). WOB : 15K-25K, TOP DRV

RPM: 70/80; SPP 2,700 PSI; GPM: 850; DIFF PSI: 350/650; MUD MTR RPM: 136; TOP DRV TRQ: 8K/12K FT/LBS ON BTM, 2K OFF BTM; PU 134K, SO 132K, ROT: 137K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION

04:00 SLIDE DRILL F/1690' T/1725';(35' @ 70 FPH) TF:275 M; WOB: 15K; GPM: 850; MRPM: 136; SPP: 2,700 PSI; DIFF: 250 PSI; P/U: 140K; SO: 138K

04:30 ROT DRLG F/1725' T/2035' (310' @ 206.6 FPH). WOB : 20K-25K, TOP DRV RPM: 70/80; SPP 2,750 PSI; GPM: 850; DIFF PSI: 350/650; MUD MTR RPM: 136; TOP DRV TRQ: 8K/12K FT/LBS ON BTM, 2K OFF BTM; PU 140K, SO 138K, ROT: 140K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION

Vis (s/qt): 28, Dens (lb/gal): 10.00, pH: 8.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
880.0	879.76	2.20	154.70	-17.50	0.34	-16.38	6.33
971.0	970.71	1.60	145.70	-20.43	0.73	-19.01	7.79
1,063.0	1,062.69	1.10	120.60	-22.30	0.83	-20.52	9.27
1,155.0	1,154.67	1.00	97.10	-23.26	0.48	-21.07	10.83
1,247.0	1,246.66	1.10	99.00	-23.95	0.12	-21.31	12.50
1,342.0	1,341.64	1.20	95.70	-24.72	0.13	-21.55	14.39
1,436.0	1,435.61	1.50	93.20	-25.49	0.33	-21.71	16.60
1,531.0	1,530.58	1.60	95.20	-26.39	0.12	-21.90	19.16
1,625.0	1,624.53	1.80	95.40	-27.42	0.21	-22.16	21.94
1,720.0	1,719.51	0.70	109.20	-28.31	1.19	-22.49	23.97
1,814.0	1,813.51	0.20	106.10	-28.73	0.53	-22.73	24.67
1,909.0	1,908.51	0.40	87.70	-28.90	0.23	-22.76	25.16

02/01/2018

Rig Name: H&P 602

Depth = 4,390.0 Progress = 2355.0

06:00 ROT DRLG F/2035' T/2442' (407' @ 116 FPH). WOB : 25K-30K, TOP DRV RPM: 70/80; SPP 2,900 PSI; GPM: 850; DIFF PSI: 400/650; MUD MTR RPM: 136; TOP DRV TRQ: 8K/12K FT/LBS ON BTM, 2K OFF BTM; PU 150K, SO 145K, ROT: 148K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION

09:30 SLIDE DRILL F/2442' T/2480';(38' @ 76 FPH) TF:250 M; WOB: 25K; GPM: 850; MRPM: 136; SPP: 2,900 PSI; DIFF: 250 PSI; P/U: 160K; SO: 155K

10:00 ROT DRLG F/2480' T/2720' (240' @ 80 FPH). WOB : 25K-30K, TOP DRV RPM: 70/80; SPP 2,000 PSI; GPM: 690 (DUE TO GENERATOR ISSUES); DIFF PSI: 400/650; MUD MTR RPM: 110; TOP DRV TRQ: 8K/12K FT/LBS ON BTM, 2K OFF BTM; PU 160K, SO 155K, ROT: 158K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION

13:00 ROT DRLG F/2720' T/3099' (379' @ 126.3 FPH). WOB : 25K-40K, TOP DRV RPM: 70/80; SPP 3,450 PSI; GPM: 900; DIFF PSI: 400/700; MUD MTR RPM: 144; TOP DRV TRQ: 8K/12K FT/LBS ON BTM, 2K OFF BTM; PU 170K, SO 165K, ROT: 168K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION

16:00 SLIDE DRILL F/3099' T/3139';(40' @ 80 FPH) TF:230 M; WOB: 25K; GPM: 850; MRPM: 136; SPP: 2,900 PSI; DIFF: 250 PSI; P/U: 160K; SO: 155K

16:30 ROT DRLG F/3139' T/3,488' (349' @ 116.3 FPH). WOB : 25K-40K, TOP DRV RPM: 70/80; SPP 3,450 PSI; GPM: 900; DIFF PSI: 400/700; MUD MTR RPM: 144; TOP DRV TRQ: 8K/12K FT/LBS ON BTM, 2K OFF BTM; PU 170K, SO 165K, ROT: 168K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION

19:30 SLIDE DRILL F/3,488' T/3,530';(42' @ 42 FPH) TF:270 M; WOB: 25/35K; GPM: 905; MRPM: 145; SPP: 2,886 PSI; DIFF: 364 PSI; P/U: 160K; SO: 155K

20:30 ROT DRLG F/3,530' T/3,961' (431' @ 95.8 FPH). WOB : 25K-40K, TOP DRV RPM: 65; SPP 3,250 PSI; GPM: 905; DIFF PSI: 500/650; MUD MTR RPM: 145; TOP DRV TRQ: 10K/15K FT/LBS ON BTM, 3K OFF BTM; PU 180K, SO 170K, ROT: 178K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; CLOSED LOOP FOR 1HR NO G/L

01:00 SLIDE DRILL F/3,961' T/3,997';(36' @ 36 FPH) TF:260 M; WOB: 25/35K; GPM: 905; MRPM: 145; SPP: 2,886 PSI; DIFF: 350 PSI; P/U: 187K; SO: 182K

02:00 ROT DRLG F/3,997' T/4,150' (153' @ 102 FPH). WOB : 25K-40K, TOP DRV RPM: 70/80; SPP 3,300 PSI; GPM: 905; DIFF PSI: 400/650; MUD MTR RPM: 145; TOP DRV TRQ: 10K/15K FT/LBS ON BTM, 3K OFF BTM; PU 187K, SO 182K, ROT: 186K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

03:30 SLIDE DRILL F/4,150' T/4,181';(31' @ 62 FPH) TF:210 M; WOB: 25/35K; GPM: 905; MRPM: 145; SPP: 2,886 PSI; DIFF: 350 PSI; P/U: 187K; SO: 182K

04:00 ROT DRLG F/4,181' T/4,390' (209' @ 104.5 FPH). WOB : 25K-40K, TOP DRV RPM: 65; SPP 3,300 PSI; GPM: 850/905; DIFF PSI: 500/700; MUD MTR RPM: 136/145; TOP DRV TRQ: 10K/15K FT/LBS ON BTM, 3K OFF BTM; PU 193K, SO 186K, ROT: 190K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

Vis (s/qt): 28, Dens (lb/gal): 10.15, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
2,004.0	2,003.50	0.40	91.40	-29.08	0.03	-22.75	25.82
2,098.0	2,097.50	0.70	78.00	-29.22	0.35	-22.64	26.71
2,193.0	2,192.49	1.00	68.10	-29.18	0.35	-22.21	28.05

2,287.0	2,286.47	1.30	69.90	-29.03	0.32	-21.54	29.81
2,382.0	2,381.44	1.70	66.20	-28.77	0.43	-20.60	32.11
2,477.0	2,476.42	0.70	46.90	-28.33	1.12	-19.64	33.83
2,572.0	2,571.41	0.70	29.70	-27.66	0.22	-18.74	34.54
2,666.0	2,665.40	0.90	43.50	-26.89	0.29	-17.70	35.33
2,761.0	2,760.39	1.00	53.60	-26.23	0.20	-16.67	36.51
2,855.0	2,854.37	1.30	37.80	-25.32	0.46	-15.34	37.83
2,950.0	2,949.34	1.60	40.40	-23.96	0.32	-13.48	39.35
3,044.0	3,043.28	2.20	46.40	-22.41	0.67	-11.23	41.50
3,139.0	3,138.24	1.10	53.50	-21.26	1.18	-9.43	43.56
3,234.0	3,233.23	1.10	63.00	-20.77	0.19	-8.48	45.10
3,328.0	3,327.20	1.40	63.00	-20.39	0.32	-7.55	46.93
3,423.0	3,422.18	1.40	56.90	-19.84	0.16	-6.39	48.94
3,518.0	3,517.16	0.80	6.00	-18.89	1.15	-5.09	49.98
3,612.0	3,611.15	1.20	327.10	-17.34	0.81	-3.61	49.51
3,707.0	3,706.12	1.40	330.30	-15.26	0.22	-1.77	48.40
3,801.0	3,800.09	1.50	334.40	-12.93	0.15	0.34	47.30
3,896.0	3,895.06	1.70	350.60	-10.30	0.52	2.85	46.53
3,990.0	3,989.02	1.60	311.30	-7.81	1.18	5.09	45.31
4,085.0	4,083.98	1.70	300.20	-5.67	0.35	6.67	43.10
4,180.0	4,178.94	1.60	266.20	-4.36	1.02	7.30	40.56
4,274.0	4,272.91	1.60	254.70	-4.05	0.34	6.86	37.98

02/02/2018

Rig Name: H&P 602

Depth = 5,055.0 Progress = 665.0

06:00 ROT DRLG F/4,390' T/4,750' (360' @ 90 FPH). WOB : 25K-40K, TOP DRV RPM: 65; SPP 3,300 PSI; GPM: 850/905; DIFF PSI: 500/700; MUD MTR RPM:136/145; TOP DRV TRQ: 10K/15K FT/LBS ON BTM, 3K OFF BTM; PU 195K, SO 186K, ROT: 194K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

10:00 ROT DRLG F/4,750' T/5,055' TD (305' @ 87 FPH). WOB : 25K-40K, TOP DRV RPM: 65; SPP 3,300 PSI; GPM: 850/905; DIFF PSI: 500/700; MUD MTR RPM:136/145; TOP DRV TRQ: 10K/15K FT/LBS ON BTM, 3K OFF BTM; PU 195K, SO 186K, ROT: 194K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

13:30 CIRCULATE SAMPLES TO VERIFY LAMAR TOP; VERIFIED BY MUD LOGGER @ 5,035'; PUMPED 2, 45 BBL; 65 VIS SWEEPS TO CLEAN HOLE FOR CASING; 1ST SWEEP BACK WITH 25% SCREEN COVERAGE OF FINE AND MEDIUM FINE CUTTINGS; 2ND SWEEP BACK WITH 5% SCREEN COVERAGE OF FINE AND MEDIUM FINE CUTTINGS; FLOW CHECK WELL, WELL IS STATIC; PUMP WEIGHTED SLUG TO DRY PIPE.

15:30 TOOH F/5,055'-T/SURFACE'; (CHECK FLOW @ SHOE WELL STATIC) USE MANUAL TONGS TO BREAK 6.5" HOLE IS TAKING PROPER FILL; NO UNUSUAL DRAG SEEN.

19:30 L/D BHA; MWD TOOL & DRAIN MOTOR & BREAK BIT (GRADE BIT 1 INNER; 1 OUTER;) USED MANUAL TONGS TO BREAK OUT BHA

23:00 CLEAN & ORGANIZE RIG FLOOR FOR CASING RUN

23:30 PULL WEAR BUSHING;

00:00 PJSM RIG UP H&P'S CRT; FUNCTION TEST (C/O 4 HYDRAULIC FITTINGS ON CRT HYD. HOSES)WHILE BRINGING FLOAT EQUIPMENT & CENTRILIZERS TO RIG FLOOR; 2 POINT CALIBRATE CRT

01:30 PJSM; MAKE UP SHOE TRACK AS FOLLOWS, FS, 1 JT OF 40#, HCL-80 CSG, FC; ALL THREAD LOCKED AND CENTRALIZED 10' ABOVE FS AND FC; PUMP THROUGH SHOE TRACK (GOOD) RUN 56 JTS. 9.625" 40# HCL-80 LTC T/2320'; TORQUED TO 7,300 FT/LBS; CENTRALIZED EVERY 3RD COLLAR TO SURFACE; FILLING EVERY 30 JTS.

Vis (s/qt): 28, Dens (lb/gal): 10.25, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
4,369.0	4,367.88	1.10	250.90	-4.08	0.53	6.21	35.84
4,464.0	4,462.86	1.10	241.90	-4.31	0.18	5.49	34.18
4,558.0	4,556.85	0.70	225.10	-4.77	0.51	4.66	32.97
4,653.0	4,651.85	0.50	184.10	-5.44	0.48	3.83	32.53
4,747.0	4,745.84	0.60	194.20	-6.24	0.15	2.95	32.38
4,842.0	4,840.84	0.70	196.40	-7.16	0.11	1.91	32.10
4,937.0	4,935.83	0.80	203.70	-8.16	0.15	0.74	31.67
5,000.0	4,998.82	0.80	214.20	-8.77	0.23	-0.02	31.24

02/03/2018

Rig Name: H&P 602

Depth = 5,055.0 Progress = 0.0

06:00 RUN TOTAL 65 JTS 9.625" 40# HCL-80 LTC; SHOE @ 5,045' FLOAT COLLAR @ 5,000'; RUN CENTRALIZERS AS DIRECTED; FILL PIPE EVERY 30 JTS.

10:00 CIRCULATE & CONDITION HOLE; 270 GPM
 11:00 WAITING ON CEMENTERS
 15:00 PJSM; CEMENT 9 5/8" CSG AS FOLLOWS: PRESSURE TEST LINES TO 3,000 PSI, PUMPED 20 BBL FRESH WATER GEL SPACER, PUMPED 1,220 SX (607 BBLs) 11.0 PPG LEAD NEOCEM C, @ 2.808 YIELD, 17.37 GAL/SK FW, W/ 150% XS PUMPED AT 6 BPM, PUMPED 100 SX (24 BBLs) 14.8 PPG TAIL HALCEM C @ 1.333 YIELD, 6.42 GAL/SK FW; W/ 20% XS PUMPED AT 5 BPM, DROP NON-ROTATING PLUG & DISPLACE WITH 380 BBLs OF FW. BUMP PLUG @ 3 BPM @ 840 PSI PRESSURE UP TO 1410 PSI, HELD FOR 5 MIN, BLEED OFF LINES 2 BBLs, FLOATS HOLDING. HAD FULL RETURNS FOR THE ENTIRE JOB - 40 BBLs (80 SACKS) CEMENT CIRCULATED BACK TO SURFACE; BUMPED PLUG ON SCHEDULE @ 18:00 HRS.
 18:00 WOC; RIG DOWN HALLIBURTON; FLUSH OUT BOP'S AND FLOWLINE WITH SUGAR WATER; DRAIN STACK TO CELLAR; RIG DOWN CRT AND CSG RUN TOOLS; BACK OFF LJ; RUN WASH UP TOOL; INSTALL PACKOFF AND LOCK RING IN WELLHEAD TEST TO 5K PSI FOR 15 MINS. PULL TEST @ 40K, #2 PRESS. TEST T/5000 PSI HOLD F/15 MINS.; WHILE DUMPING 10 PPG BW FROM ACTIVE PITS TO INSIDE RESERVE. EMPTY OUT ACTIVE TANKS & FILL UP WITH 9.2 PPG CUT BRINE; INSTALL BIT GUIDE & WEAR BUSHING;
 01:30 PICK UP BHA #3 AS FOLLOWED; SMITH 8 3/4 XS616 SER# JN5975; TFA.902; 6.5" 7/8 5.0 STAB .288 RPG; 1.15 BEND ADJ. MOTOR; 8.5 STAB; UBHO; NMDC; 8.5 STAB; X-O; 12-6.5 DC; X-O; 21-5" HWDP; SCRIBE MOTOR & TEST MOTOR & MWD; (GOOD)
 04:00 TIH F/1066' T/4755' PULL TRIP NIPPLE; FILLING PIPE EVERY 30 STDS
 Vis (s/qt): 28, Dens (lb/gal): 10.30, pH: 10.0

02/04/2018

Rig Name: H&P 602

Depth = 7,879.0 Progress = 2824.0

06:00 INSTALL ROTATING HEAD
 06:30 TIH F/4,755' T/4,985' (TAGGED CEMENT)
 07:00 CIRCULATE & CONDITION MUD TILL WE HAVE ALL AIR OUT OF WELL BORE & GET 9.2 CUT BRINE ALL THE WAY AROUND;
 08:00 PERFORM CASING TEST 2700 PSI 30 MIN (GOOD TEST)
 09:00 ROT DRLG F/5,055' T/5,065' (10' @ 20 FPH). WOB : 20K, TOP DRV RPM: 40; SPP 1,000 PSI; GPM: 400; DIFF PSI: 400; MUD MTR RPM: 112; TOP DRV TRQ: 6K FT/LBS ON BTM, 3K OFF BTM; PU 190K, SO 175K, ROT: 180K
 09:30 CIRCULATE BOTTOMS UP
 10:00 PERFORM FIT TO A 10# EMW (GOOD TEST) 210 PSI
 10:30 ROT DRLG F/5,065' T/5,605' (540' @ 135 FPH). WOB : 20K-30K, TOP DRV RPM: 70; SPP 1,800 PSI; GPM: 600; DIFF PSI: 400/500; MUD MTR RPM: 168; TOP DRV TRQ: 10K FT/LBS ON BTM, 3K OFF BTM; PU 190K, SO 175K, ROT: 180K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;
 14:30 ROT DRLG F/5,605' T/5,976' (371' @ 148.4 FPH). WOB : 35K, TOP DRV RPM: 70; SPP 1,900 PSI; GPM: 600; DIFF PSI: 400/500; MUD MTR RPM: 168; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 210K, SO 180K, ROT: 188K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;
 17:00 SERVICE RIG
 17:30 ROT DRLG F/5,976' T/6,840' (864' @ 169.1 FPH). WOB : 35K, TOP DRV RPM: 70; SPP 1,900 PSI; GPM: 600; DIFF PSI: 400/500; MUD MTR RPM: 168; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 210K, SO 186K, ROT: 195K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; CLOSED LOOP F/19:30 T/20:30 NO G/L (HAVING 10 BBL FLOW ONLY DURING CONNECTIONS F/6361')(FLOW @ 6300')
 22:00 ROT DRLG F/6,840' T/7,320' (480' @ 160 FPH). WOB : 25/33K, TOP DRV RPM: 50; SPP 2,200 PSI; GPM: 600; DIFF PSI: 400/700; MUD MTR RPM: 173; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 225K, SO 198K, ROT: 198K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;
 01:00 SLIDE DRILL F/7,320' T/7,347' (27' @ 54 FPH) TF: 50 R; WOB: 25/35K; GPM: 600; MRPM: 173; SPP: 2,200 PSI; DIFF: 350 PSI; P/U: 235K; SO: 208K
 01:30 ROT DRLG F/7,320' T/7,791' (471' @ 134.6 FPH). WOB : 20/30K, TOP DRV RPM: 50; SPP 2,200 PSI; GPM: 600; DIFF PSI: 400/800; MUD MTR RPM: 173; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 245K, SO 214K, ROT: 220K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; (CLOSED LOOP F/04:30 T/05:30)
 05:00 SLIDE DRILL F/7,791' T/7,820' (29' @ 58 FPH) TF: 0; WOB: 15/20K; GPM: 600; MRPM: 173; SPP: 2,200 PSI; DIFF: 350 PSI; P/U: 245K; SO: 216K
 05:30 ROT DRLG F/7,820' T/7,879' (59' @ 118 FPH). WOB : 20/30K, TOP DRV RPM: 50; SPP 2,200 PSI; GPM: 600; DIFF PSI: 400/800; MUD MTR RPM: 173; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 245K, SO 214K, ROT: 220K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; (CLOSED LOOP F/04:30 T/05:30 NO G/L)
 Vis (s/qt): 28, Dens (lb/gal): 9.30, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
5,083.0	5,081.81	1.10	211.70	-9.68	0.36	-1.18	30.50
5,178.0	5,176.79	1.20	214.30	-10.92	0.12	-2.78	29.46

5,272.0	5,270.77	1.20	215.10	-12.16	0.02	-4.40	28.34
5,367.0	5,365.75	1.10	218.50	-13.31	0.13	-5.92	27.20
5,461.0	5,459.73	1.10	220.00	-14.33	0.03	-7.32	26.06
5,556.0	5,554.72	1.10	216.60	-15.38	0.07	-8.75	24.93
5,650.0	5,648.70	1.20	217.70	-16.51	0.11	-10.25	23.79
5,745.0	5,743.68	1.20	217.00	-17.69	0.02	-11.84	22.58
5,839.0	5,837.66	1.20	221.10	-18.81	0.09	-13.36	21.34
5,934.0	5,932.63	1.30	222.50	-19.90	0.11	-14.91	19.96
6,029.0	6,027.61	1.30	217.90	-21.09	0.11	-16.55	18.57
6,123.0	6,121.58	1.30	219.40	-22.32	0.04	-18.22	17.24
6,218.0	6,216.56	1.30	217.10	-23.57	0.05	-19.91	15.90
6,312.0	6,310.54	1.10	218.90	-24.72	0.22	-21.46	14.69
6,407.0	6,405.52	1.20	218.10	-25.82	0.11	-22.96	13.51
6,501.0	6,499.50	1.30	215.50	-27.05	0.12	-24.60	12.28
6,596.0	6,594.47	1.30	217.00	-28.36	0.04	-26.34	11.01
6,691.0	6,689.45	1.30	216.30	-29.66	0.02	-28.07	9.72
6,785.0	6,783.43	1.20	211.60	-30.97	0.15	-29.76	8.57
6,879.0	6,877.41	1.10	217.70	-32.16	0.17	-31.32	7.50
6,974.0	6,972.39	1.20	212.80	-33.35	0.15	-32.87	6.41
7,069.0	7,067.37	1.10	212.10	-34.61	0.11	-34.48	5.38
7,163.0	7,161.35	1.20	219.70	-35.76	0.19	-36.00	4.28
7,258.0	7,256.33	1.20	228.70	-36.74	0.20	-37.43	2.89
7,352.0	7,350.31	1.10	304.40	-36.46	1.50	-37.57	1.41
7,447.0	7,445.29	1.30	303.30	-34.93	0.21	-36.46	-0.24
7,542.0	7,540.27	1.20	295.20	-33.45	0.21	-35.44	-2.04
7,636.0	7,634.25	1.10	284.50	-32.34	0.25	-34.80	-3.81
7,731.0	7,729.23	1.10	270.70	-31.60	0.28	-34.56	-5.60

02/05/2018

Rig Name: H&P 602

Depth = 8,648.0 Progress = 769.0

06:00 ROT DRLG F/7,879' T/8,318' (439' @ 109.7 FPH). WOB :30/35K, TOP DRV RPM: 50; SPP 2,250 PSI; GPM: 600; DIFF PSI: 400/700; MUD MTR RPM:173; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 250K, SO 228K, ROT: 234K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; (CLOSED LOOP 1 HOUR NO G/L)

10:00 ROT DRLG F/8,318' T/8,648' (330' @ 73.3FPH). WOB :30/35K, TOP DRV RPM: 50; SPP 2,250 PSI; GPM: 600; DIFF PSI: 400/700; MUD MTR RPM:173; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 250K, SO 228K, ROT: 234K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; (CLOSED LOOP 1 HOUR NO G/L)

14:30 CIRCULATE & CONDITION HOLE; PUMP 40 BBL 65 VIS SWEEP HAD 10% SCREEN COVERAGE OF FINES; CIRCULATE HOLE CLEAN; BULLHEAD 90 BBLS 13 KWM; CHECK FLOW; WELL STATIC;

16:30 TOOH F/8,648' T/1160'; CHECK FLOW @ SHOE WELL STATIC; FILL HOLE WITH CALCULATED FILL; NO UNUSUAL DRAG SEEN.CHECK FLOW @ 1160' WELL STATIC; PULL ROTATING HEAD & INSTALL TRIP NIPPLE

23:00 PULL ROTATING HEAD & INSTALL TRIP NIPPLE

23:30 TOOH F/1160' T/BIT; DRAIN MOTOR, BREAK BIT, L/D MOTOR & # STABILIZER (GRADE BIT 8 INNER 2 OUTER)

01:30 P/U MOTOR & SCRIBE M/U MOTOR; UBHO; NM DC;INSTALL MWD TOOL (TEST GOOD); M/U STABILIZER'; TIH WITH BHA F/80' T/1071'

04:00 TIH F/1071' T/2,018' FILL PIPE EVERY 30 STDS

04:30 WELL CONTROL;HAD 4 BBL GAIN CHECKED FOR FLOW; WELL FLOWING @ .25 BBL PER 1 MIN. WELL STOPPED FLOWING MONITORED WELL FOR 30 MINS WELL STATIC

05:00 TIH F/2,018' T/4668' MONITORING WELL THROUGH TRIP TANK; FILL PIPE EVERY 30 STDS

Vis (s/qt): 28, Dens (lb/gal): 9.30, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
7,826.0	7,824.21	1.50	316.40	-30.23	1.13	-33.65	-7.37
7,920.0	7,918.19	1.10	319.90	-28.32	0.43	-32.07	-8.80
8,015.0	8,013.18	0.70	310.80	-26.99	0.45	-30.99	-9.83
8,109.0	8,107.17	0.70	269.60	-26.36	0.52	-30.62	-10.84
8,204.0	8,202.16	0.60	254.70	-26.19	0.21	-30.75	-11.90
8,298.0	8,296.16	0.80	222.40	-26.52	0.46	-31.37	-12.82
8,393.0	8,391.15	0.90	208.00	-27.40	0.25	-32.52	-13.61
8,488.0	8,486.13	0.90	191.40	-28.60	0.27	-33.91	-14.11
8,582.0	8,580.12	1.30	178.30	-30.28	0.50	-35.70	-14.22

02/06/2018

Rig Name: H&P 602

Depth = 8,800.0 Progress = 152.0

06:00 TIH F/4,668' T/4,960' MONITORING WELL THROUGH TRIP TANK; FILL PIPE EVERY 30 STDS

06:30 REMOVE TRIP NIPPLE & INSTALL ROTATING HEAD

07:00 TIH F/4,960' T/8542' MONITORING WELL THROUGH TRIP TANK; FILL PIPE EVERY 30 STDS

09:00 FILL STRING AND ANNULUS WITH 9.3 PPG CUT BRINE; SHUT IN ANNULUS PREVENTER; INDUCE FLOW BY BULLHEADING 280 BBLs OF 9.3 PPG CUT BW DOWN BACKSIDE; OPEN WELL ON CHOKE; WELL IS FLOWING @ 14 BBLs/MIN; CIRCULATE BOTTOMS UP ON CHOKE; NO FLARE.

11:00 SAFETY REAMING F/8542' T/8,648; FAN BOTTOM 3 TIMES TO INSURE ALL TRASH REMOVED;

12:00 ROT DRLG F/8,648' T/8,800' (152' @ 30.4 FPH). WOB :30/35K, TOP DRV RPM: 50; SPP 2,250 PSI; GPM: 600; DIFF PSI: 400/700; MUD MTR RPM:90; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 250K, SO 228K, ROT: 234K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; (CLOSED LOOP 1 HOUR NO G/L)

17:00 CIRCULATE & CONDITION HOLE; PUMP 40 BBL 65 VIS SWEEP HAD 10% SCREEN COVERAGE OF FINES; CIRCULATE HOLE CLEAN;WHILE BUILDING 13 PPG KILL MUD;CHECK FLOW WELL FLOWING @ 3 BBLs PER MIN.;SHUT IN WELL; BULLHEAD 90 BBLs 13 KWM; CHECK FLOW; WELL STATIC;

20:00 TOOH F/8800' T/1261' FILL HOLE W/ CALCULATED FILL; NO NO UNUSUAL DRAG SEEN.CHECK FLOW @ SHOE & 1261' WELL STATIC;

01:00 PULL ROTATING HEAD & INSTALL TRIP NIPPLE

01:30 TIH F/1261' T/BIT DRAIN MOTOR BREAK BIT GRADE BIT (2 INNER 8 OUTER)

02:30 TEST MWD & MOTOR (GOOD TEST) M/U SMITH BIT 8.750" Z713;TIH F/BIT T/80'

03:30 SERVICE RIG TOP DRIVE; BLOCKS & DRAW WORKS

04:00 TIH W/BHA F/80'T/1071';

04:30 TIH F/1071'T/4387'; FILLING PIPE EVERY 30 STANDS

Vis (s/qt): 28, Dens (lb/gal): 9.40, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
8,681.0	8,679.08	1.80	171.70	-32.91	0.54	-38.36	-13.97

02/07/2018

Rig Name: H&P 602

Depth = 9,394.0 Progress = 594.0

06:00 TIH F/4,387' T/5,000'; MONITORING WELL THROUGH TRIP TANK; FILL PIPE EVERY 30 STDS

06:30 REMOVE TRIP NIPPLE & INSTALL ROTATING HEAD

07:00 TIH F/5,000' T/8,634'; MONITORING WELL THROUGH TRIP TANK; FILL PIPE EVERY 30 STDS

09:00 FILL STRING AND ANNULUS WITH 9.4 PPG CUT BRINE; SHUT IN ANNULUS PREVENTER; INDUCE FLOW BY BULLHEADING 280 BBLs OF 9.4 PPG CUT BW DOWN BACKSIDE; OPEN WELL ON CHOKE; WELL IS FLOWING @ 19 BBLs/MIN; CIRCULATE BOTTOMS UP ON CHOKE; NO FLARE.

11:00 SAFETY REAM F/8,634' T/8,800';

11:30 ROT DRLG F/8,800' T/8,827' (27' @ 54 FPH). WOB : 40K, TOP DRV RPM: 50; SPP 2,100 PSI; GPM: 600; DIFF PSI: 300/500; MUD MTR RPM:90; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 265K, SO 240K, ROT: 245K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

12:00 SLIDE DRILL F/8,827' T/8,863';(36' @ 36 FPH) TF:0; WOB: 25K; GPM: 600; MRPM: 90; SPP: 2,100 PSI; DIFF: 200 PSI; P/U: 265K; SO: 245K

13:00 ROT DRLG F/8,863' T/8,922' (59' @ 39.3 FPH). WOB : 40K, TOP DRV RPM: 50; SPP 2,100 PSI; GPM: 600; DIFF PSI: 300/500; MUD MTR RPM:90; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 265K, SO 240K, ROT: 245K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

14:30 SLIDE DRILL F/8,922' T/8,955';(33' @ 22 FPH) TF:0; WOB: 25K; GPM: 600; MRPM: 90; SPP: 2,100 PSI; DIFF: 200 PSI; P/U: 265K; SO: 245K

16:00 ROT DRLG F/8,955' T/9,215' (260' @ 28.3 FPH). WOB : 40/42K, TOP DRV RPM: 50; SPP 2,100 PSI; GPM: 600; DIFF PSI: 300/500; MUD MTR RPM:90; TOP DRV TRQ: 12K FT/LBS ON BTM, 3K OFF BTM; PU 268K, SO 248K, ROT: 253K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

22:00 SLIDE DRILL F/9,215' T/9,235';(20' @ 20 FPH) TF:90 MAG; WOB: 40K; GPM: 600; MRPM: 96; SPP: 2,100 PSI; DIFF: 200 PSI; P/U: 277K; SO: 242K

23:00 ROT DRLG F/9,235' T/9,311' (76' @ 38 FPH). WOB : 40K, TOP DRV RPM: 50; SPP 2,100 PSI; GPM: 600; DIFF PSI: 180/500; MUD MTR RPM:96; TOP DRV TRQ: 12K FT/LBS ON BTM, 7K OFF BTM; PU 277K, SO 242K, ROT: 256K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

01:00 SLIDE DRILL F/9,311' T/9,352';(41' @ 10.25 FPH) TF:270 MAG; WOB: 40/43K; GPM: 600; MRPM: 96; SPP: 2,100 PSI; DIFF: 200 PSI; P/U: 277K; SO: 242K

05:00 ROT DRLG F/9,352' T/9,394' (42' @ 42 FPH). WOB : 40K, TOP DRV RPM: 50; SPP 2,100 PSI; GPM: 600; DIFF PSI: 180/500; MUD MTR RPM:96; TOP DRV TRQ: 11/14K FT/LBS ON BTM, 7K OFF BTM; PU 277K, SO 242K, ROT: 256K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

Vis (s/qt): 28, Dens (lb/gal): 9.35, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
8,776.0	8,774.02	2.20	178.80	-36.15	0.49	-41.66	-13.71
8,871.0	8,868.97	1.60	213.80	-38.76	1.35	-44.58	-14.41
8,965.0	8,962.95	1.10	266.20	-39.41	1.35	-45.73	-16.04
9,060.0	9,057.93	1.10	253.30	-39.22	0.26	-46.05	-17.83
9,154.0	9,151.90	1.70	258.60	-39.10	0.65	-46.59	-20.06
9,249.0	9,246.86	1.90	247.40	-39.16	0.42	-47.47	-22.89

02/08/2018

Rig Name: H&P 602

Depth = 9,417.0 Progress = 23.0

06:00 SLIDE DRILL F/9,394' T/9,401';(7' @ 3.5 FPH) TF:40 MAG; WOB: 25K; GPM: 600; MRPM: 96; SPP: 2,100 PSI; DIFF: 200 PSI; P/U: 282K; SO: 262K

08:00 CIRCULATE & CONDITION HOLE; PUMP 40 BBL 65 VIS SWEEP HAD 10% SCREEN COVERAGE OF FINES; CHECK FLOW WELL FLOWING @ 2 BBLs PER MIN.;SHUT IN WELL; BULLHEAD 100 BBLs 13 KWM; CHECK FLOW; WELL STATIC;

10:00 TOO H F/9404' T/8371' FILL HOLE W/ CALCULATED FILL; NO UNUSUAL DRAG SEEN.

11:00 PULL ROTATING HEAD & INSTALL TRIP NIPPLE

11:30 TOO H F/8371' T/80' FILL HOLE W/ CALCULATED FILL; NO UNUSUAL DRAG SEEN.CHECK FLOW @ SHOE & 1261' WELL STATIC;

14:00 DRAIN MOTOR; BREAK BIT;GRADE BIT 7 INNER RING OUT 5 OUTER INSPECT MWD & TEST

15:00 WAITING FOR BIT DECISION

16:00 M/U BIT; TIH F/BIT T/80'

16:30 TIH F/80'T/4950' FILL PIPE EVERY 30 STANDS

19:00 PULL TRIP NIPPLE & INSTALL ROTATING HEAD

19:30 SLIP & CUT 93' DRLG. LINE

20:30 TIH F/4,950'-T/9,300'; FILLING PIPE EVERY 30 STANDS

00:00 FILL STRING AND ANNULUS WITH 9.4 PPG CUT BRINE; SHUT IN ANNULUS PREVENTER; INDUCE FLOW BY BULLHEADING 280 BBLs OF 9.4 PPG CUT BW DOWN BACKSIDE; OPEN WELL ON CHOKE; WELL IS FLOWING @ 5 BBLs/MIN; CIRCULATE BOTTOMS UP ON CHOKE; NO FLARE.

02:00 REAM F/9,391'-T/9,401'; 13' @ 13 FT/HR; 600 GPM; 10K WOB; 2,215 PSI;

03:00 SLIDE DRILL F/9,401' T/9,417';(16' @ 5.3 FPH) TF: 42 MAG; WOB: 25K/45K; GPM: 600; MRPM: 96; SPP: 2,250 PSI; DIFF: 80/200 PSI; P/U: 277K; SO: 242K

Vis (s/qt): 28, Dens (lb/gal): 9.40, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
9,343.0	9,340.78	2.70	222.00	-40.49	1.36	-49.72	-25.81

02/09/2018

Rig Name: H&P 602

Depth = 10,151.0 Progress = 734.0

06:00 SLIDE DRILL F/9,417' T/9,430';(13' @ 5.2 FPH) TF: 40 MAG; WOB: 40K; GPM: 600; MRPM: 96; SPP: 2,075 PSI; DIFF: 450 PSI; P/U: 282K; SO: 242K

08:30 ROT DRLG F/9,430' T/9,487' (57' @ 22.8 FPH). WOB : 30K, TOP DRV RPM: 75; SPP 2,075 PSI; GPM: 600; DIFF PSI: 180/500; MUD MTR RPM:96; TOP DRV TRQ: 11/14K FT/LBS ON BTM, 7K OFF BTM; PU 282K, SO 242K, ROT: 268K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

11:00 RIG SERVICE TOP DRIVE & DRAWWORKS

11:30 ROT DRLG F/9,487' T/9,584' (97' @ 38.8 FPH). WOB : 30/35K, TOP DRV RPM: 75; SPP 2,075 PSI; GPM: 600; DIFF PSI: 450; MUD MTR RPM:96; TOP DRV TRQ: 14K FT/LBS ON BTM, 7K OFF BTM; PU 282K, SO 242K, ROT: 268K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

14:00 SLIDE DRILL F/9,584' T/9,604';(20' @ 5 FPH) TF: 40 MAG; WOB: 40K; GPM: 600; MRPM: 96; SPP: 2,075 PSI; DIFF: 450 PSI; P/U: 282K; SO: 242K (CLOSED LOOP F/14:00 T/15:00 NO G/L)

18:00 SLIDE DRILL F/9,604' T/9,625';(21' @ 7 FPH) TF: 42 MAG; WOB: 47K; GPM: 600; MRPM: 96; SPP: 2,300 PSI; DIFF: 325 PSI; P/U: 282K; SO: 242K

21:00 ROT DRLG F/9,625' T/9,867' (242' @ 60.5 FPH). WOB : 47K, TOP DRV RPM: 75; SPP 2,500 PSI; GPM: 600; DIFF PSI: 250/400; MUD MTR RPM:96; TOP DRV TRQ: 11/15K FT/LBS ON BTM, 7K OFF BTM; PU 282K, SO 242K, ROT: 268K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; (CLOSED F/18:00 T/19:00, 12 BBLs GAIN)

01:00 ROT DRLG F/9,867' T/10,151' (284' @ 56.8 FPH). WOB : 47K, TOP DRV RPM: 75; SPP 2,500 PSI; GPM: 600; DIFF PSI: 250/450; MUD MTR RPM:96; TOP DRV TRQ: 15/17K FT/LBS ON BTM, 7K OFF BTM; PU 308K, SO 261K, ROT: 277K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

Vis (s/qt): 28, Dens (lb/gal): 9.50, pH: 9.5

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
9,438.0	9,435.70	2.20	228.70	-42.44	0.61	-52.58	-28.68
9,533.0	9,530.61	2.70	221.60	-44.40	0.61	-55.46	-31.54
9,627.0	9,624.55	1.20	210.00	-46.26	1.64	-57.97	-33.50

9,722.0	9,719.53	1.10	192.30	-47.75	0.39	-59.72	-34.19
9,817.0	9,814.51	1.50	223.90	-49.17	0.85	-61.51	-35.25
9,911.0	9,908.48	1.30	202.80	-50.61	0.58	-63.38	-36.51
10,006.0	10,003.46	1.00	206.00	-52.06	0.32	-65.12	-37.29

02/10/2018

Rig Name: H&P 602

Depth = 10,745.0 Progress = 594.0

06:00 ROT DRLG F/10,151' T/10,341' (190' @ 54.3 FPH). WOB : 48K, TOP DRV RPM: 65; SPP 2,100 PSI; GPM: 600; DIFF PSI: 250/450; MUD MTR RPM:96; TOP DRV TRQ: 18K FT/LBS ON BTM, 8K OFF BTM; PU 302K, SO 260K, ROT: 282K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;(CLOSED LOOP F/06:00 T/07:00 NO G/L)

09:30 SLIDE DRILL F/10,341' T/10,354';(13' @ 5.6 FPH) TF: 40 MAG; WOB: 35K; GPM: 615; MRPM: 98; SPP: 2,150 PSI; DIFF: 150 PSI; P/U: 312K; SO: 286K

12:00 ROT DRLG F/10,354' T/10,530' (176' @ 44 FPH). WOB : 48K, TOP DRV RPM: 65; SPP 2,100 PSI; GPM: 600; DIFF PSI: 250/450; MUD MTR RPM:96; TOP DRV TRQ: 18K FT/LBS ON BTM, 8K OFF BTM; PU 312K, SO 265K, ROT: 286K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;(CLOSED LOOP F/14:00 T/15:00 7.5 LOSS)

16:00 RIG SERVICE

16:30 SLIDE DRILL F/10,530' T/10,544';(14' @ 2.5 FPH) TF: 40 MAG; WOB: 35K; GPM: 615; MRPM: 98; SPP: 2,150 PSI; DIFF: 150 PSI; P/U: 305K; SO: 258K

22:00 ROT DRLG F/10,544' T/10,655' (111' @ 27.75 FPH). WOB : 20K/25K, TOP DRV RPM: 75; SPP 2,250 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96; TOP DRV TRQ: 19K FT/LBS ON BTM, 8K OFF BTM; PU 355K, SO 265K, ROT: 290K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; (CLOSE LOOP FROM 00:00 TO 01:00, NO GAIN OR LOSS SEEN)

02:00 ROT DRLG F/10,655' T/10,745' (90' @ 22.5 FPH). WOB : 20K/25K, TOP DRV RPM: 75; SPP 2,250 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96; TOP DRV TRQ: 19K FT/LBS ON BTM, 8K OFF BTM; PU 355K, SO 265K, ROT: 290K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

Vis (s/qt): 28, Dens (lb/gal): 9.40, pH: 10.5

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
10,100.0	10,097.45	1.30	229.00	-53.11	0.58	-66.55	-38.46
10,195.0	10,192.41	1.60	223.90	-54.22	0.34	-68.22	-40.19
10,290.0	10,287.37	1.90	222.80	-55.69	0.32	-70.33	-42.18
10,384.0	10,381.32	2.00	221.70	-57.36	0.11	-72.69	-44.33
10,479.0	10,476.25	2.40	218.40	-59.39	0.44	-75.49	-46.67
10,574.0	10,571.18	2.00	230.10	-61.21	0.63	-78.11	-49.18
10,668.0	10,665.12	1.90	229.30	-62.51	0.11	-80.18	-51.62

02/11/2018

Rig Name: H&P 602

Depth = 11,090.0 Progress = 345.0

06:00 ROT DRLG F/10,745' T/10,850' (105' @ 26.25 FPH). WOB : 20K/25K, TOP DRV RPM: 75/85; SPP 2,250 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96; TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 325K, SO 289K, ROT: 300K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

10:00 ROT DRLG F/10,850' T/10,948' (98' @ 24.5 FPH). WOB : 20K, TOP DRV RPM: 75/85; SPP 2,250 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96; TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 332K, SO 289K, ROT: 300K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION; (CLOSED LOOP F/12:40 T/13:40 7 BBL LOSS)

14:00 ROT DRLG F/10,948' T/11,000' (52' @ 26 FPH). WOB : 20K/25K, TOP DRV RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96; TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 3532, SO 290K, ROT: 300K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

16:00 RIG SERVICE

16:30 ROT DRLG F/11,000' T/11,090' [KOP] (90' @ 25.7 FPH). WOB : 20K/25K, TOP DRV RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96; TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 3532, SO 290K, ROT: 300K PUMPING 10 BBL, 65 VIS SWEEPS EVERY OTHER CONNECTION;

20:00 PUMP 2, 45 BBL, 65 VIS SWEEPS; 1ST SWEEP BACK WITH 50%/60% SCREEN COVERAGE OF FINE AND MEDIUM FINE CUTTINGS; 2ND SWEEP BACK WITH 10% SCREEN COVERAGE OF FINE CUTTINGS; SHAKERS STEADILY CLEANING UP BETWEEN SWEEPS; SHAKERS CLEAN AFTER 2ND SWEEP; FLOW CHECK WELL, FLOWING @ 5 BBL/S MIN; SHUT IN AND KILL FLOW BY BULLHEADING 100 BBL OF 12.6 PPG KWM DOWN ANNULUS; FLOW CHECK AND WELL IS STATIC.

22:30 TOH FOR CURVE ASSEMBLY F/11,090'-T/5,043';(9 5/8" CSG SHOE) PU: 362K; ROT: 305K; SO: 272K. NO UNUSUAL DRAG SEEN.

01:30 FLOW CHECK WELL, WELL IS STATIC; PULL ROTATING HEAD AND INSTALL TRIP NIPPLE.

02:00 TOH FOR CURVE ASSEMBLY F/5,043'-T/431'; LD 6, 6.5" DC'S; PU: 191K; ROT:

188K; SO: 180K. NO UNUSUAL DRAG SEEN.

Vis (s/qt): 28, Dens (lb/gal): 9.40, pH: 10.5

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
10,763.0	10,760.06	2.30	235.00	-63.77	0.47	-82.30	-54.37
10,858.0	10,854.99	2.00	233.80	-64.95	0.32	-84.37	-57.27
10,952.0	10,948.93	2.00	238.30	-65.95	0.17	-86.21	-59.99
11,039.0	11,035.87	2.40	245.70	-66.60	0.56	-87.75	-62.94

02/12/2018

Rig Name: H&P 602

Depth = 11,625.0 Progress = 535.0

06:00 DRAIN MOTOR; BREAK BIT (GRADE BIT 3 INNER 2 OUTER);PULL MWD
TOOL;LAY OUT MOTOR & 2 IBS'S;CHANGE OUT UBHO SUB; P/U MOTOR;
SCRIBE;INSTALL NEW MWD; TEST (GOOD) MAKE UP NEW BIT

09:00 P/U 9JTS. DP OFF GROUND T/REPLACE DC'S; TIH F/91'T/10,850'; FILL PIPE
EVERY 30 STDS. MONITORING WELL THROUGH TRIP TANK

14:00 INSTALL ROTATING HEAD

14:30 FILL STRING AND ANNULUS WITH 9.4 PPG CUT BRINE; SHUT IN ANNULUS
PREVENTER; INDUCE FLOW BY BULLHEADING 280 BBLs OF 9.4 PPG CUT BW
DOWN BACKSIDE; OPEN WELL ON CHOKE; WELL IS FLOWING @ 12 BBLs/MIN;
CIRCULATE BOTTOMS UP ON CHOKE; 15' FLARE FOR 20 MINS..

17:30 SLIDE DRILL F/11,090' T/11,276';(186' @ 33.81 FPH) TF: HS; WOB: 25K/40K;
GPM: 600; MRPM: 173; SPP: 2,500 PSI; DIFF: 380/480 PSI; P/U: 311K; SO:
254K

23:00 ROT DRLG F/11,276' T/11,301' (25' @ 100 FPH). WOB : 20K/25K, TOP DRV
RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96;
TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 315, SO 255K, ROT:
300K

23:15 SLIDE DRILL F/11,301' T/11,325';(24' @ 48 FPH) TF: HS; WOB: 25K/40K;
GPM: 600; MRPM: 173; SPP: 2,500 PSI; DIFF: 380/480 PSI; P/U: 311K; SO:
254K

23:45 ROT DRLG F/11,325' T/11,345' (20' @ 80 FPH). WOB : 20K/25K, TOP DRV
RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96;
TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 315, SO 255K, ROT:
300K

00:00 SLIDE DRILL F/11,345' T/11,514';(169' @ 42.25 FPH) TF: HS; WOB: 25K/40K;
GPM: 600; MRPM: 173; SPP: 2,500 PSI; DIFF: 380/480 PSI; P/U: 318K; SO:
241K

04:00 ROT DRLG F/11,514' T/11,543' (29' @ 58 FPH). WOB : 20K/25K, TOP DRV
RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96;
TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 324, SO 240K, ROT:
288K

04:30 SLIDE DRILL F/11,543'- T/11,607';(64' @ 64 FPH) TF: HS; WOB: 25K/40K;
GPM: 600; MRPM: 173; SPP: 2,500 PSI; DIFF: 380/480 PSI; P/U: 318K; SO:
241K

05:30 ROT DRLG F/11,607' T/11,625' (18' @ 36 FPH). WOB : 20K/25K, TOP DRV
RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96;
TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 324, SO 240K, ROT:
288K

Vis (s/qt): 28, Dens (lb/gal): 9.45, pH: 10.5

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
11,083.0	11,079.84	2.00	255.50	-66.71	1.24	-88.32	-64.52
11,128.0	11,124.79	4.00	327.90	-65.17	8.65	-87.19	-66.12
11,178.0	11,174.38	10.30	345.20	-59.02	13.18	-81.39	-68.19
11,224.0	11,219.04	17.10	350.10	-48.18	14.98	-70.73	-70.41
11,273.0	11,265.01	23.30	351.10	-31.39	12.67	-54.05	-73.15
11,319.0	11,306.85	25.80	350.80	-12.43	5.44	-35.17	-76.16
11,367.0	11,349.86	26.90	348.20	8.76	3.32	-14.23	-80.05
11,413.0	11,390.16	30.70	346.50	30.87	8.45	7.38	-84.92
11,462.0	11,431.01	36.30	345.50	57.89	11.48	33.61	-91.47
11,508.0	11,466.90	41.10	346.10	86.62	10.47	61.48	-98.52
11,556.0	11,502.37	43.60	346.20	118.93	5.21	92.87	-106.26

02/13/2018

Rig Name: H&P 602

Depth = 12,093.0 Progress = 468.0

06:00 ROT DRLG F/11,625' T/11,638' (13' @ 26 FPH). WOB : 20K/25K, TOP DRV
RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96;
TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 318, SO 260K, ROT:
283K

06:30 SLIDE DRILL F/11,638'- T/11,703';(65' @ 130 FPH) TF: 15; WOB: 25K/40K;
GPM: 600; MRPM: 173; SPP: 2,100 PSI; DIFF: 380/450 PSI; P/U: 320K; SO:
258K

07:00 ROT DRLG F/11,703' T/11,713' (10' @ 20 FPH). WOB : 20K/25K, TOP DRV

RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96;
TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 318, SO 260K, ROT:
283K

07:30 SLIDE DRILL F/11,713'- T/11,892';(179' @ 44.75 FPH) TF: 0; WOB: 25K/40K;
GPM: 600; MRPM: 173; SPP: 2,100 PSI; DIFF: 380/450 PSI; P/U: 320K; SO:
258K

11:30 WAITING ON ORDERS FROM MANAGEMENT ON LANDING CURVE (LOWERED
TARGET F/11,704' TVD T/11,727' TVD)

12:00 SLIDE DRILL F/11,892'- T/11,938';(46' @ 46 FPH) TF: 0; WOB: 25K/40K; GPM:
600; MRPM: 173; SPP: 2,100 PSI; DIFF: 380/450 PSI; P/U: 320K; SO: 258K;
MUD LOGGER REPORTED FINDING ESTIMATED 1/2" CAVINGS IN SAMPLES @
11,900'

13:00 ROT DRLG F/11,938' T/11,958' (20' @ 40 FPH). WOB : 20K/25K, TOP DRV
RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96;
TOP DRV TRQ: 16K FT/LBS ON BTM, 8K OFF BTM; PU 318, SO 260K, ROT:
283K

13:30 SLIDE DRILL F/11,958'- T/12,079';(121' @ 40.3 FPH) TF: 0; WOB: 25K/40K;
GPM: 600; MRPM: 173; SPP: 2,100 PSI; DIFF: 380/450 PSI; P/U: 320K; SO:
258K

16:30 ROT DRLG F/12,079' T/12,093' (14' @ 28 FPH). WOB : 20K/25K, TOP DRV
RPM: 75/85; SPP 2,100 PSI; GPM: 600; DIFF PSI: 140/280; MUD MTR RPM:96;
TOP DRV TRQ: 18K FT/LBS ON BTM, 7K OFF BTM; PU 328, SO 250K, ROT:
293K

17:00 PUMP 3, 45 BBL, 65 VIS SWEEPS; 1ST SWEEP BACK WITH 60% SCREEN
COVERAGE OF FINE AND MEDIUM FINE CUTTINGS WITH 40% 1" +/- CAVINGS
; 2ND SWEEP BACK WITH 100% 1" +/- CAVINGS; 3RD SWEEP IN DP AND PIPE
STUCK @ 12,046'; PACKED OFF.

19:30 STRING STUCK AND PACKED OFF @ 12,046'; WORKING STUCK PIPE FROM
390K DOWN TO 100K; HOLDING 2,150 PSI SPP (SLOWLY BLEEDING OFF
WHILE WORKING STRING) PACKOFF WASHED OFF AND ABLE TO CIRCULATE;
PIPE CAME FREE WHILE WORKING DOWN; SHALE ON SHAKERS INCREASED IN
SIZE TO 3"; BACKREAMED UP HOLE TO 11,580' AND PUMPED 45 BBL, 65 VIS
SWEEP; SWEEP CAME BACK WITH 30%/40% SCREEN COVERAGE OF 1/4"-1"
SHALE CAVINGS; HIGH SIDE MOTOR TO MAKE WIPER TRIP TO KOP, WHILE
PULLING MOTOR KEEPS FLOPPING OVER 180 DEG TO LOW SIDE; DECISION
WAS MADE TO TOH AND CHECK BHA FOR OVERTORQUED OR SPUN OR
TWISTED CONNECTIONS.

01:30 BULLHEAD 100 BBLs OF 13.0 PPG KWM TO KILL FLOW; FLOW CHECK, WELL IS
STATIC

02:30 TOH F/10,980'-T/4,540'; PULLED UP TO 402K TO BREAK OVER @ 10,980'; PU:
320K; SO: 172K

Vis (s/qt): 28, Dens (lb/gal): 10.45, pH: 10.5

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	VS (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
11,603.0	11,535.19	47.80	349.70	152.45	10.40	125.76	-113.24
11,651.0	11,566.81	49.80	352.60	188.25	6.17	161.44	-118.78
11,697.0	11,595.06	54.40	355.60	223.94	11.24	197.53	-122.48
11,745.0	11,622.11	57.00	354.00	262.85	6.08	237.02	-126.08
11,792.0	11,646.00	61.90	350.20	302.87	12.53	277.08	-131.68
11,840.0	11,667.60	64.60	349.00	345.51	6.05	319.23	-139.42
11,886.0	11,685.42	69.80	347.20	387.77	11.87	360.71	-148.17
11,934.0	11,700.41	73.80	345.70	433.31	8.85	405.02	-158.86
11,980.0	11,711.70	77.80	346.30	477.86	8.79	448.29	-169.64
12,029.0	11,719.95	82.80	348.40	526.05	11.04	495.40	-180.21
12,041.0	11,721.36	83.70	349.10	537.92	9.48	507.08	-182.54

02/14/2018

Rig Name: H&P 602

Depth = 12,093.0 Progress = 0.0

06:00 FINISH TOOH F/4000' T/DIRECTIONAL TOOLS;

07:30 DRAIN MOTOR BREAK BIT (GRADE BIT 1 INNER 3 OUTER 1/16 OUT OF
GAUGE)PULL MWD TOOL & L/D DIRECTIONAL TOOLS;

08:30 SERVICE RIG; LEVEL DERRICK

09:30 P/U BHA TO FLOOR ATTEMPT TO PULL JETS F/BIT;

11:00 M/U X-O; BIT SUB; BIT & TIH F/SURFACE T/11,052'; FILL PIPE EVERY 30
STANDS

15:30 FILL STRING AND ANNULUS WITH 9.4 PPG CUT BRINE; SHUT IN ANNULUS
PREVENTER; INDUCE FLOW BY BULLHEADING 280 BBLs OF 9.4 PPG CUT BW
DOWN BACKSIDE; OPEN WELL ON CHOKE; WELL IS FLOWING @ 14 BBLs/MIN;
CIRCULATE BOTTOMS UP ON CHOKE; NO FLARE .

18:30 WASH F/11,052' T/11,888'; 35 RPM TO BREAK FRICTION; TRQ: 8,500/9,500
FT/LBS; 600 GPM; 1,600 PSI; NO ISSUES WASHING DOWN;

21:00 PUMPED 2, 45 BBL, 65 VIS SWEEPS; 1ST SWEEP BACK WITH 35%/45%
SCREEN COVERAGE OF FINE AND MED CUTTINGS; 5% LARGE SHALE; 2ND
SWEEP BACK WITH 15%/20% SCREEN COVERAGE OF FINE AND MEDIUM
CUTTINGS, 1%/2% LARGE SHALE; SHAKERS CLEANED UP 900 STKS AFTER

SWEEP.
22:30 TOH F/ 11,888'-T/10,950'; PU: 330K; SO: 278K; SLUG PIPE; BULLHEADED 100 BBLs OF 13.0 PPG, KWM DOWN ANNULUS TO KILL FLOW; FLOW CHECK, WELL IS STATIC.
00:00 TOH LAYING DOWN DP (SLM) F/10,950'-T/3864'; PU: 305K; SO: 291K; PRESSURE WASHING TOOL JOINTS, DOPING AND INSTALLING THREAD PROTECTORS ON BOX AND PINS.
Vis (s/qt): 28, Dens (lb/gal): 9.50, pH: 10.0

02/15/2018

Rig Name: H&P 602

Depth = 12,093.0 Progress = 0.0

06:00 TOH LAYING DOWN DP (SLM) F/3,864'-T/SURFACE; PU: 305K; SO: 291K; PRESSURE WASHING TOOL JOINTS, DOPING AND INSTALLING THREAD PROTECTORS ON BOX AND PINS; (SLM = 11,889.7', NO CORRECTIONS MADE TO TALLY)
11:00 PULL WEAR BUSHING
11:30 CLEAN RIG FLOOR; LOAD CSG EQUIPMENT TO FLOOR; RIG UP CRT AND FUNCTION TEST, TEST GOOD; SET STOP POINTS.
12:30 PJSM; MAKE UP 7" 32# LTC HCP-110 SHOE TRACK CONSISTING OF FLOAT SHOE, TWO CASING JOINTS, & FLOAT COLLAR THREAD LOCKING ALL CONNECTIONS TO TOP OF FLOAT COLLAR; TORQUE TO 9,000 FT-LBS; PUMP THROUGH FLOAT EQUIPMENT; INSTALL STOP RINGS & CENTRALIZERS 10' ABOVE SHOE & 10' BELOW FLOAT COLLAR
13:30 RAN A TOTAL OF 261 JTS OF 32#, P-110, LTC, 7" CSG; F/SURFACE'-T/11,862' TORQUING W/ CRT TOOL TO 9,000 FT/LBS; CENTRALIZED EVERY OTHER JT FROM FC TO KOP WITH SOLID BODY TURBULIZERS THEN EVERY 3RD JOINT TO 9 5/8" SHOE @ 5,045' WITH BOWSPRING CENTRALIZERS; CSG SHOE @ 11,862'; FLOAT COLLAR @ 11,767'; PU- 345K, SW- 300K; SO - 295K
05:00 CASING STUCK @ 11,767'; FILLING CASING AND ANNULUS W/ 9.4 PPG SYSTEM FLUID.
Vis (s/qt): 28, Dens (lb/gal): 9.50, pH: 10.0

02/16/2018

Rig Name: H&P 602

Depth = 12,093.0 Progress = 0.0

06:00 INDUCE FLOW BY BULLHEADING 180 BBLs OF 9.4 PPG SYSTEM MUD DOWN BACKSIDE; WELL FLOWING @ 5 BBLs/MIN; CIRCULATE BOTTOMS UP; WASH CASING DOWN AND LAND MANDREL IN WELL HEAD WITH 300K.
08:30 CIRCULATE BOTTOMS UP AND VERIFY NO LOSSES; CONDUCT PJSM WITH ALL HANDS AND HALLIBURTON.
10:00 CEMENT 7" CSG AS FOLLOWS: PRESSURE TEST LINES TO 5,000 PSI, PUMPED 40 BBL FW SPACER, FOLLOWED BY 48 BBLs OF SUPER FLUSH REACTIVE SPACER; FOLLOWED BY 20 BBL FRESH WATER GEL SPACER, FOLLOWED BY 410 SX (208 BBLs) 11.0 PPG LEAD NEOCEM CEMENT, 2.847 YIELD, 17.36 GAL/SK FW, W/ 120% XS PUMPED AT 6 BPM, FOLLOWED BY 590 SX (126 BBLs) 15.6 PPG TAIL HALCEM H, 1.196 YIELD, 5.41 GAL/SK FW; W/ 0% XS PUMPED AT 5 BPM; STING OUT WITH CRT & DROP NON-ROT PLUG & DISPLACE WITH 424 BBLs OF 9.4 PPG SYSTEM MUD. BUMPED PLUG ON SCHEDULE; FINAL CIRCULATING PRESS 2,150 PSI @ 3 BPM; BUMPED PLUG PRESSURED UP TO 2,670 PSI; BLEED OFF 4.5 BBLs BACK FROM LINES; FLOATS HOLDING. HAD FULL RETURNS THE ENTIRE JOB; PUMPED JOB WITH RETURNS THROUGH CHOKE MAINTAINING 5 BBL IN/ 4 BBL OUT DURING LAST 100 BBLs OF DISPLACEMENT; 3 BBLs IN/ 2 BBLs OUT FOR LAST 30 BBLs; WELL SHUT IN ON CHOKE WHILE WOC, MONITORING ANNULAR PSI; PLUG DOWN @ 13:00 HRS; 5'/10' FLARE THROUGHOUT PUMP JOB; LIGHT OIL SHEEN ACROSS SHAKERS.
13:00 WOC; RD HALLIBURTON; CLEAN PITS; RD BACKYARD; BEGIN CHANGING LINERS IN MUD PUMPS; RIG UP NOV SOLIDS CONTROL IN BACKYARD; RACK AND STRAP 195 JTS OF 4" DP.

02/17/2018

Rig Name: H&P 602

Depth = 12,093.0 Progress = 0.0

06:00 WOC UNTIL 13:00; WHILE WAITING, WORKING ON MUD PUMPS; CHANGE OUT SWIVEL PACKING; CLEAN OUT MUD GAS SEPARATOR; CLEAN OUT PUMP SUCTIONS AND SCREENS; WORK ON HOPPER; PREPARING MUD PITS FOR OBM;
13:00 72 PSI ON CHOKE; OPENED TO TRIP TANK AND BLEED 1/2 BBL FLUID AND VENTED GAS; PSI DROPPED TO 0 AND FLOW STOPPED; MONITOR FLOW FOR 15 MINUTES; NO FLOW WELL IS STATIC;
13:30 BACKED OFF LJ; RAN WASH UP TOOL AND WASHED OUT BOP STACK AND WELLHEAD; (3" OF WET MUSHY CEMENT ON TOP OF ANNULAR BAG, CEMENT CAME FROM CRT, DRIPPINGS FROM WHEN WE STUNG OUT TO DROP PLUG. THE CEMENT WAS THOUGHT TO BE WASHED OFF THE FLOOR BUT WAS WASHED DOWN THROUGH THE ROTARY TABLE) NO CEMENT BELOW TOP OF ANNULAR BAG; INSTALLED PACKOFF AND TESTED TO 5,000 PSI FOR 15/MINS

17:30 C/O SAVER SUB;GRABBER DIES;STABBING GUIDE;C/O VARIABLE RAMS IN BOP
19:30 PJSM FILL UP BOP W/WATER; TEST ALL RAMS 250 LOW 10,000 HIGH; TEST ANNULAR 250 LOW & 5,000 HIGH;TEST FLOOR VALVES & BACK TO THE MUD PUMPS 7,500 PSI; PERFORM CASING TEST 4,200 PSI (GOOD)
01:30 RIG SERVICE
02:00 INSTALL WEAR BUSHING
02:30 PU LATERAL BHA AS FOLLOWS; 7/8, 5.0, 1.5 FBHM, .63 RPG, MOTOR; FLOAT SUB,UBHO; 2, NMDC'S; SCRIBE MOTOR TO HIGH SIDE AND SHALLOW TEST MWD AND MOTOR; TESTS GOOD; MU 6", U711M PDC BIT JETTED OPEN;

02/18/2018

Rig Name: H&P 602

Depth = 12,093.0 Progress = 0.0

06:00 WHILE WAITING ON REAMER WITH CORRECT THREADS; PICKING UP 4" DP, BUILDING STANDS IN MOUSEHOLE AND RACKING BACK IN DERRICK.
10:30 PU NEW REAMER, MU AND RUN IN HOLE F/195'-T/2,005';
11:30 FILL PIPE AND BREAK CIRCULATION @ 275 GPM; SPP = 1,095 PSI; PICKUP AND MAKE UP AGITATOR AND TEST @ 275 GPM; GODD TEST WITH SPP = 1,525'; PRESSURE DROP ACROSS TOOL = 430 PSI; (RECIPROCATING STRING WHILE PUMPING)
12:00 RIG SERVICE
12:30 RUNNING IN HOLE, F/2,005'-T/6,210'; PICKING UP 4" DP FROM RACKS;
16:00 RACK AND STRAP 198 JTS OF 4" DP; PUT DP IN TALLY.
17:00 RUN IN HOLE WITH 4" DP FROM RACKS F/6,210'-T/ 11,705'
22:00 L/D TRIP NIPPLE;INSTALL ROTATING HEAD
23:00 SLIP & CUT (84') DRILL LINE
00:00 BREAK CIRCULATION & DRLG CEMENT & FLOAT COLLAR; F/11,717' T/11,834' (TAG CEMENT @ 11,717' FLOAT COLLAR @ 11,746' SHOE @ 11,836')
01:00 CIRCULATE HOLE CLEAN @ 200 GPM & RIG UP KATCH KAN (RECIPROCATING STRING WHILE PUMPING)
02:00 DISPLACE CUT BRINE W/365BBLS OF 13.5 PPG OBM @ 240 GPM (RECIPROCATING STRING WHILE PUMPING)
04:00 DRLG SHOE AND WASH & CLEAN OUT OPEN HOLE F/11,836 T/ 11,943'

(TAKING CHECK SHOTS W/ MWD AND SO FAR STILL IN ORIGINAL HOLE)

Vis (s/qt): 81, Dens (lb/gal): 13.50, pH: 10.0

02/19/2018

Rig Name: H&P 602

Depth = 12,093.0 Progress = 0.0

06:00 WASHING & CLEAN OUT OPEN HOLE F/11,943 - T/ 12,026'; 1ST RUN DOWN GPM; 275; SPP; 4,950 PSI; VARIED RPM'S 25/75; TRQ: 5K/10.5K; MMRPM: 173; PU: 260K; SO" 185K; ROT: 220K; ROT AND WASHED TO 12,018'; STALLING TDS AND PACKING OFF; WORKED STRING UP TO CSG SHOE TO GET FREE; CIRC BTMS UP; 40%/50% SCREEN COVERAGE WITH FINE AND COFFEE GROUND SIZE CUTTINGS, 3%/4% 1/4"- 1/2" SHALE; MW: 13.5 PPG, VIS: 89, TEMP: 65 DEG; 2ND RU DOWN SLIDING WITH MOTOR HIGH SIDE; GPM: 200; SPP: 3,670 PSI; MMRPM: 126; PU: 260K; SO: 185K; ROT: 220K; SLID TO 12,018' TAKING 8K/15K WOB W/ 100 PSI DIFF; WORKED DOWN TO 12,026' AND PACKED OFF; SHUT OFF PUMPS AND RELAXED PACKOFF, SPP FELL TO 0; PUMPED @ 175 GPM WITH FULL RETURNS, INCREASE TO 220 GPM AND PACKING OFF AGAIN; TRYED TO ROTATE; STALLED TDS WITH 10.5K FT/LBS TRQ; WORKED STRING BACK UP TO CASING SHOE TO GET FREE; CIRCULATE BOTTOMS UP; 40%/50% SCREEN COVERAGE OF FINE AND COFFEE GROUND SIZE CUTTINGS, 5%/10% 1/4"-1/2" SHALE; MW: 13.5 PPG, VIS: 72, TEMP: 77 DEG.; 3RD RUN DOWN; SLIDING WITH MOTOR HIGH SIDE GPM: 300; SPP: 5,450 PSI; MMRPM: 189; PU: 260K; SO: 185K; ROT; 220K; TAKING 10K/15K WOB @ 12,019'; ATTEMPTING TO WASH DOWN, KEEPS PACKING OFF, ABLE TO WASH OFF PACKOFF BY REDUCING FLOW RATE BUT KEEPS PACKING OFF WHEN PIPE IS MOVED; ROTATED @ 45 RPM, TDS STALLING OUT @ 10.5K FT/LBS TRQ, AND STRING PACKING OFF, UNABLE TO MAINTAIN FLOW; WORKED STRING BACK UP TO CSG SHOE TO GET FREE; CIRCULATE BOTTOMS UP AND NOTIFIED MANAGEMENT OF LACK OF PROGRESS; BOTTOMS UP: 40%/50% SCREEN COVERAGE OF FINE AND COFFEE GROUND SIZE CUTTINGS, 5%/10%, 1/4"-1/2" SHALE; DECISION WAS MADE TO PERFORM F.I.T. TEST TO 16.5 PPG EMW WITH 13.5 PPG SYSTEM OBM.
16:30 PERFORM F.I.T. TO AN EMW OF 16.5 PPG WITH 13.5 PPG SYSTEM OBM; TARGET PRESSURE WAS 1,820 PSI; LEAKED OFF AT 1,777 PSI; EMW = 16.43 PPG; CASING SHOE TVD: 11,667'
17:30 DUSTING UP MW F/13.5 PPG TO NO MORE THAN 14.0 PPG AND ATTEMPT TO WASH DOWN AND CLEAN OPEN HOLE F/11,836 - T/ 12,026'; 4TH RUN GPM; 275; SPP; 4,950 PSI; VARIED RPM'S 25/30; TRQ: 5K/10.5K; MMRPM: 173; PU: 260K; SO" 185K; ROT: 220K; ROT AND WASHED TO 12,016'; STALLING TDS

AND PACKING OFF; WORKED STRING UP TO CSG SHOE TO GET FREE; CIRC BTMS UP; 40%/50% SCREEN COVERAGE WITH FINE AND COFFEE GROUND SIZE CUTTINGS, 3%/4% 1/4"- 1/2" SHALE; MW: 13.7 PPG, VIS: 60, TEMP: 65 DEG; 5TH RUN DOWN SLIDING WITH MOTOR HIGH SIDE; GPM: 200; SPP: 3,670 PSI; MMRPM: 126; PU: 260K; SO: 185K; ROT: 220K; SLID TO 12,018' TAKING 8K/15K WOB W/ 100 PSI DIFF; WORKED DOWN TO 12,017' AND PACKED OFF; SHUT OFF PUMPS AND RELAXED PACKOFF, SPP FELL TO 0; PUMPED @ 175 GPM WITH FULL RETURNS, INCREASE TO 220 GPM AND PACKING OFF AGAIN; WORKED STRING BACK UP TO CASING SHOE TO GET FREE; MADE A DECISION TO PUMP A SLUG AND TOOH T/ L/D DIRECTIONAL TOOLS;

01:00 TOOH F/11,836' T/ BHA ; NORMAL DRAG AND WELL IS TAKING PROPER AMOUNT OF FLUID

05:30 OUT OF HOLE, MISSING BOTTOM 23' OF MOTOR AND BIT; TWISTED OFF; (STATOR TUBE, STATOR, DRIVE SHAFT, BENT HOUSING, BIT BOX AND BIT. LOST IN HOLE

Vis (s/qt): 74, Dens (lb/gal): 14.00, pH: 0.0

02/20/2018

Rig Name: H&P 602

Depth = 12,026.0 Progress = 0.0

06:00 FINISHED LAYING DOWN DIRECTIONAL TOOLS

07:00 SERVICE RIG

07:30 CLEAN RIG FLOOR; STRAP AND MEASURE B/S; LOAD TO FLOOR; PICKUP ULTERRA U713M PDC BIT AND MU ON B/S. WOO

09:00 TIH F/ SURFACE-T/11,962'; SLICK TO FIND TOP OF FISH; TAGGED UP @ 11,962' W/ 3K; PICKED UP 10' AND SET BACK DOWN SAME SPOT W/ 10K; PICKED UP 10' AND SET BACK DOWN SAME SPOT W/ 15K; PU: 215K; SO: 188K; NO UNUSUAL DRAG NOTICED;

15:00 TOH F/ 11,962'-T/11,753'; INSIDE 7" CSG SHOE; PU: 215K; SO: 188K;

15:30 WAITING ON SIDETRACK MOTOR TO ARRIVE; MONITORING WELL ON TRIP TANK

23:00 CIRC. BTMS UP TO GET GAS OUT @ 266 GPM; MAX GAS 1,113 UNITS; FLOW CHECK (WELL IS STATIC); PUMP DRY JOB

00:30 TOH F/ 11,836' T/ SURFACE; L/D BIT & BIT SUB;

04:30 PU SIDE TRACK BHA AS FOLLOWS; 7/8, 5.0, 2.0 FXD, .63 RPG, MOTOR; FLOAT SUB, UBHO; 2, NMDC'S; SCRIBE MOTOR TO HIGH SIDE AND SHALLOW TEST MWD AND MOTOR; TESTS GOOD; MU 6", DRILLFORMANCE 611 PDC BIT JETTED OPEN;

Vis (s/qt): 82, Dens (lb/gal): 14.00, pH: 0.0

02/21/2018

Rig Name: H&P 602

Depth = 11,895.0 Progress = 15.0

06:00 MAKE UP BIT AND TORQUE; TIH F/SURFACE-T/11,849'; PU: 205K; SO: 169K; WELL GIVING PROPER DISPLACEMENT.

10:00 ORIENT TF TO 120L; BEGIN TROUGH CUTTING; F/11,880'-T/11,900'; GPM: 220; SPP: 3,800 PSI; DIFF: 150 PSI; PU: 186K; SO: 162; PACKING OFF AND PRESSURING UP.

11:30 SLOWED PUMPS AND RELAXED PACKOFF; WORKED STRING UP TO CASING SHOE; HIGH SIDED MOTOR; WASHED FROM CASING SHOE TO 11,900' UNTILL SHAKERS WERE CLEAN.

16:30 ORIENT TF TO 120L; BEGIN TROUGH CUTTING; F/11,800'-T/11,900'; GPM: 300; SPP: 5,500 PSI; DIFF: 150 PSI; MMRPM: 189; PU: 186K; SO: 162;

18:00 TIME DRILL F/11,880' T/ 11,895'; GPM 300; SPP: 3560 PSI; MMRPM: 189; PU: 186K; SO: 162K (1" EVERY 5 MINS FIRST 10'; 1" EVERY 4 MINS FOR 5'; 1" EVERY 3 MINS FOR 5')

Vis (s/qt): 68, Dens (lb/gal): 14.00, pH: 0.0

02/22/2018

Rig Name: H&P 602

Depth = 11,933.0 Progress = 38.0

06:00 TIME DRILL F/11,895' T/ 11,933'; TFO: 135; GPM 300; SPP: 3560 PSI; MMRPM: 189; PU: 186K; SO: 162K; AT 11,910' STARTED STACKING WT AND PULLED 221K TO GET FREE; ATTEMPTED T/ TIME DRILL AGAIN AND IT APPEARED WE SLID INTO ORIGINAL HOLE; LOST BIT WT, REACTIVE TRQ AND DIFF

14:30 WOO; HAD CONFERENCE W/ ALL PARTIES INVOLVED ABOUT THE NEXT PLAN FORWARD; THE DECISION WAS MADE TO L/D DIR. TOOLS & P/U 600' OF 2 7/8" TUBING TO SET A CEMENT PLUG; SLID DOWN TO 11,962' & TAGGED TOP OF FISH

16:30 CIRC BTMS @ 300 GPM SAW 779 UNITS OF GAS; FLOW CHECK (WELL STATIC); PUMP DRY JOB

18:00 TOOH F/ 11,910' T/ SURFACE; NORMAL DRAG; HOLE TAKE PROPER AMOUNT OF FLUID

23:00 LAY DOWN DIRECTION TOOLS & BREAK & GRADE BIT 1 INNER 2 OUTER;

00:00 STRAP TUBING & TOOLS TO FLOOR; PJSM; RIG UP BYRD CASING CREW & RAN 20 JTS 2 7/8 P-110 7.90# PH6 TUBING; RIG DOWN CASING CREW;

03:30 WAIT ON CORRECT CROSS OVER (X-O DELIVERED MARKED 2 7/8 BUT WAS 2
3/8)(CLEAN & ORGANIZE FLOOR)
Vis (s/qt): 66, Dens (lb/gal): 14.10, pH: 0.0

02/23/2018

Rig Name: H&P 602

Depth = 11,933.0 Progress = 0.0

06:00 M/U X-O F/ TUBING T/ DP;TIH F/ 628' T/ 11,962';TAG TOF @ 11,962'

13:00 CIRCULATE BOTTOMS UP @ 225 GPM;MAX GAS SEEN 2579 UNITS