

FORGE Energy
UL 13 Keene 2412AH
API Number: 42-003-46953

12/09/2014

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Directions: From 385&1967, go 8.0 miles west on 1967, turn north through cattle guard, pass caliche pit to first cattle guard on left(1.0 miles)turn west through cattle guard, go 150 yards, turn north, follow road past frac pit, location on right.

12/11/2014

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Location construction
 Pad is cleared, leveled and 20% caliched

12/13/2014

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Location construction
 Pad construction is 80% complete, pit construction is complete

12/16/2014

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Location construction
 Pack caliche and water

12/17/2014

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Location construction
 Installed cellar and leveled pad
 Location construction is complete

12/19/2014

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Set 80' of 16"X80'of conductor, line pits,install barbed wire fence, and laid poly pipe

12/20/2014

Rig Name:

Depth = 0.0 Progress = 0.0

07:00 Installed landing ring

12/23/2014

Rig Name: H&P 348

Depth = 0.0 Progress = 0.0

- 06:00 RIG DOWN; LOAD OUT TRUCKS; SPOT LOADS ON NEW LOCATION; RAISE MAST @ 15:00 HRS; RAISED DRILLERS CABIN @ 15:30 HRS; RAISE SHAKERS & GAS BUSTER @ 17:00; INSTALL CENTER BEAM;
- 18:00 RAISE SUB @ 19:00 HRS; SET BOP HANDLER & PIPE WRANGLER; PLUG IN ALL ELECTRICAL; R/U BACK YARD & MISC. EQUIP; SCOPE OUT MAST @ 20:00 HRS; SPOOL UP DRAW WORKS; UNDOCK TDS; 2 PT. CALIBRATION; RUN OUT ALL EQUIPMENT; PERFORM PRE-SPUD INSPECTION; RIG ACCEPTED FOR DAY WORK @ 23:30 HRS;
- 23:30 INSTALL CONDUCTOR; FLOWLINE & TURNBUCKLES; TEST TIW; DART VALVE; STANDPIPE; KELLY HOSE; MUD LINES & CHOKE MANIFOLD T/250 LOW FOR 5 MIN; 3500 PSI HIGH FOR 10 MIN; STRAP BHA; M/U BIT & BHA; TAG UP @ 96' & TEST INPETRO MWD;

12/24/2014

Rig Name: H&P 348

Depth = 1,674.0 Progress = 1578.0

- 06:00 CONTINUE TESTING MWD
- 07:00 SPUD IN @ 07:00 & DRILL F/ 96' T/282'= 186' @ 62 FPH; GPM 650; RPM 60; PP 1220; P/U 45; S/O 41; ROT 42; ON BTM TQ 3; OFF BTM TQ 1; SAFETY HUDDLE DISCUSS M/U BHA;
- 10:00 ROT DRILL SURFACE HOLE F/282' T/863'= 581' @ 145 FPH; GPM 700; WOB 35; RPM 80; PP 1760; P/U 65; S/O 64; ROT 42; ON BTM TQ 7; OFF BTM TQ 1; SAFETY HUDDLE DISCUSS PROPER LIFTING TECHNIQUE;
- 14:00 ROT DRILL SURFACE HOLE F/863' T/1043'= 180' @ 45 FPH; GPM 600; WOB 5; RPM 125; PP 1700; P/U 70; S/O 66; ROT 68; ON BTM TQ 2; OFF BTM TQ 1; SAFETY HUDDLE DISCUSS SLIP & TRIP HAZARDS IN WET WEATHER;
- 18:00 RIG SERVICE
- 18:30 ROT DRILL SURFACE HOLE F/1043' T/1305'= 262' @ 65.5 FPH; GPM 700; WOB 5; RPM 125; PP 1950; P/U 78; S/O 78; ROT 78; ON BTM TQ 3; OFF BTM TQ 1; SAFETY HUDDLE DISCUSS UTILIZING GOOD WINTERIZATION PRACTICES;
- 22:30 ROT DRILL SURFACE HOLE F/1305' T/1519'= 214' @ 53.5 FPH; GPM 700; WOB 10; RPM 125; PP 2050; P/U 80; S/O 80; ROT 80; ON BTM TQ 4; OFF BTM TQ 1; SAFETY HUDDLE DISCUSS WORKING IN ICY CONDITIONS;
- 02:30 ROT DRILL SURFACE HOLE F/1519' T/1674'= 155' @ 44 FPH; GPM 700; WOB 12; RPM 110; PP 2000; P/U 83; S/O 83; ROT 83; ON BTM TQ 4; OFF BTM TQ 1;

Vis (s/qt): 28, Dens (lb/gal): 8.40, pH: 8.5

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	Vert Sec (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
97.0	97.00	0.09	304.00	0.06	0.09	0.04	-0.06
159.0	159.00	0.09	163.86	0.04	0.27	0.02	-0.09
311.0	311.00	0.22	239.27	-0.17	0.14	-0.24	-0.31
484.0	484.00	0.31	221.96	-0.54	0.07	-0.76	-0.91
525.0	525.00	0.31	210.75	-0.69	0.15	-0.94	-1.04
800.0	799.82	2.90	223.26	-5.15	0.94	-6.65	-6.19

831.0	830.78	3.21	221.96	-6.10	1.02	-7.87	-7.31
876.0	875.71	3.30	223.67	-7.55	0.29	-9.74	-9.05
921.0	920.63	3.69	221.96	-9.11	0.90	-11.75	-10.91
966.0	965.54	3.52	224.95	-10.69	0.56	-13.80	-12.85
1,013.0	1,012.46	3.30	225.26	-12.19	0.47	-15.77	-14.83
1,058.0	1,057.39	3.12	227.28	-13.49	0.47	-17.51	-16.65
1,103.0	1,102.33	2.90	228.95	-14.65	0.53	-19.09	-18.41
1,148.0	1,147.27	2.90	230.44	-15.71	0.17	-20.56	-20.15
1,193.0	1,192.22	2.68	232.07	-16.68	0.52	-21.93	-21.86
1,238.0	1,237.17	2.68	234.75	-17.53	0.28	-23.18	-23.55
1,283.0	1,282.12	2.68	234.05	-18.35	0.07	-24.40	-25.26
1,329.0	1,328.07	2.68	232.95	-19.22	0.11	-25.68	-26.99
1,509.0	1,507.90	2.29	236.68	-22.25	0.23	-30.19	-33.35

12/25/2014

Rig Name: H&P 348

Depth = 1,853.0 Progress = 179.0

06:00 ROT DRILL SURFACE HOLE F/1674' T/1719'= 45' @ 30 FPH; GPM 700; WOB 12; RPM 50; PP 2000; P/U 83; S/O 83; ROT 83; ON BTM TQ 4; OFF BTM TQ 1;

07:30 RIG SERVICE & CHANGE OUT ENCODER ON TDS;

08:00 CHANGE OUT ENCODER ON TDS;

08:30 ROT DRILL SURFACE HOLE F/1719' T/1853'= 134' @ 44 FPH; GPM 700; WOB 20; RPM 125; PP 2100; P/U 83; S/O 83; ROT 83; ON BTM TQ 4; OFF BTM TQ 1; OBSERVING WIND DIRECTION WHEN H2S PRESENT;

11:00 PUMP 2 X 40 BBL HI VIS SWEEPS & CIRCULATE HOLE CLEAN @ 700 GPM & 125 RPM;

13:00 T.O.H. F/ 1853' T/ SURFACE; L/D BHA & BIT;

18:00 CLEAN & CLEAR FLOOR; R/U CRT & HYD SLIPS; FUNCTION TEST; 2 PT. CALIBRATION

20:00 M/U SHOE TRACK & RUN 9.625" 36# J-55/LTC CASING T/1843'; TOP OF SHOE @ 1842'; FLOAT @ 1798';

02:30 CIRC; R/U CEMENTERS & HELD PJSM W/ CEMENTERS & CREW; TEST LINES T/2000PSI; PUMP 20BBL RED DYE GEL SPACER; PUMP 212.5 BBLs OF 12.9 PPG LEAD CEMENT; PUMP 32.25 BBLs 14.8 PPG TAIL SLURRY; DROPPED PLUG & DISPLACED W/ 139.2 BBLs FRESH WATER; 39 BBLs CEMENT T/ SURFACE; 530 PSI FINAL CIRC PRESSURE; BUMPED PLUG W/ 1030 PSI (500 PSI OVER) FLOAT HELD W/ 1 BBL BACK; R/D CEMENTERS;

05:30 REMOVE FLOW LINE & RAISE CONDUCTOR;

Vis (s/qt): 34, Dens (lb/gal): 9.30, pH: 8.5

12/26/2014

Rig Name: H&P 348

Depth = 1,853.0 Progress = 0.0

06:00 L/D LANDING JT & REMOVE CONDUCTOR; L/D CRT & HYD SLIPS; CALIBRATE DRAWWORKS; ASSEMBLE & DRESS OUT WELL HEAD; BREAK

OUT SAVER SUB & CHANGE OUT CORRISION RING; N/U BOP; HCR VALVE; KILL LINE ACCUMULATOR LINES; FLOW LINE & TURN BUCKLES; FUNCTION TEST BOP'S; TEST BOP BLIND RAMS; PIPE RAMS & HCR; T/250 LOW FOR 5 MINS & 3000 HIGH FOR 10 MINS; TEST ANNULAR & CASING T/ 1500 PSI FOR 30 MIN; INSTALL WEAR BUSHING;

16:30 RIG SERVICE & TDS INSPECTION

17:00 M/U DIRECTIONAL ASSY & BIT; TEST DIR ASSY; TIH T/1641' & WASH F/1641' T/TAGGING CEMENT @ 1778'; DRILL CEMENT F/ 1778' T/ 1790 W/ 5 WOB; 30 RPM'S; 375 GPM; ON BTM TQ 3K; PRESSURE INCREASED 600 PSI; P/U OFF BTM CYCLED PUMPS & PRESSURE SPIKED T/2000 PSI ABOVE NORMAL PRESSURE; DISCUSSED W/ FORGE MANAGEMENT TO TOH & EVALUATE THE PROBLEM; SAFETY HUDDLE DISCUSS PROPER HAND PLACEMENT WHILE STABBING PIPE;

22:00 TOH F/1790 T/ SURFACE L/D BHA & BIT; FOUND PIECES OF MOTOR STATOR IN BIT; M/U NEW BHA; CLEAN OUT & M/U BIT; TEST BHA; TIH T/1790'; DRILL SHOE TRACK T/1853'; SAFETY HUDDLE DISCUSS JSA FOR INSTALLING ROTATING HEAD; INSTALL ROTATING HEAD;

12/27/2014

Rig Name: H&P 348

Depth = 4,064.0 Progress = 2211.0

06:00 DRILL VERTICLE F/1853 T/2228'= 375 @ 93.75 FPH; WOB 25K; RPM 90; GPM 600; PP 1671 PSI; DIFF 525; P/U 70; S/O 58; R/T 65; ON BTM TQ 10 OFF BTM TQ 2; SAFETY HUDDLE DISCUSS 3 PTS OF CONTACT ON LADDERS/STAIRS;

10:00 DRILL VERTICLE F/2228' T/2725'= 497 @ 142 FPH; WOB 25K; RPM 90; GPM 600; PP 1671 PSI; DIFF 500; P/U 77; S/O 60; R/T 65; ON BTM TQ 16 OFF BTM TQ 2; SAFETY HUDDLE DISCUSS PROPER TOOLS FOR THE JOB;

13:30 RIG SERVICE, GREASE UPPER BEARING ON TDS & CHANGE OUT ENCODER;

14:00 TROUBLE SHOOT GRINDING NOISE IN TDS; CHECK TDS LUBE PUMP; GREASE BEARING FOR TRACTION MOTOR;

15:30 DRILL VERTICLE F/2725' T/3086'= 361 @ 120 FPH; WOB 25K; RPM 90; GPM 600; PP 1700 PSI; DIFF 540; P/U 87; S/O 72; R/T 80; ON BTM TQ 10 OFF BTM TQ 2; SAFETY HUDDLE DISCUSS FORKLIFT OPERATIONS;

18:00 DRILL VERTICLE F/3086' T/3377'= 291 @ 73 FPH; WOB 25K; RPM 90; GPM 600; PP 1800 PSI; DIFF 200; P/U 91; S/O 83; R/T 87; ON BTM TQ 5 OFF BTM TQ 2; SAFETY HUDDLE DISCUSS USING TAG LINES ON SUSPENDED LOADS;

22:00 DRILL VERTICLE F/3377' T/3800'= 423 @ 106 FPH; WOB 27K; RPM 90; GPM 600; PP 1800 PSI; DIFF 350; P/U 96; S/O 91; R/T 95; ON BTM TQ 7 OFF BTM TQ 2; SAFETY HUDDLE DISCUSS OSHA INCIDENT MASHED FINGERS BETWEEN ST80 & DRILL PIPE;

02:00 DRILL VERTICLE F/3800' T/4006'= 206 @ 82 FPH; WOB 30K; RPM 90; GPM 600; PP 1800 PSI; DIFF 300; P/U 101; S/O 96; R/T 99; ON BTM TQ 8 OFF BTM

TQ 2; SAFETY HUDDLE DISCUSS COMMON HARARDS RUNNING CASING;
 04:30 CONTROL DRILL UPPER CURVE F/4006' T/4064'= 58 @ 38 FPH; WOB 25K;
 RPM 60; GPM 550; PP 1700 PSI; DIFF 300; P/U 101; S/O 96; R/T 99; ON BTM TQ
 8 OFF BTM TQ 2;

Vis (s/qt): 28, Dens (lb/gal): 9.95, pH: 10.2

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	Vert Sec (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
1,887.0	1,885.72	0.35	199.53	-26.91	1.27	-37.11	-43.00
2,067.0	2,065.72	0.25	244.41	-27.47	0.14	-37.80	-43.54
2,248.0	2,246.72	0.15	259.32	-27.55	0.06	-38.01	-44.13
2,429.0	2,427.72	0.20	314.14	-27.28	0.09	-37.83	-44.59
2,609.0	2,607.72	0.13	336.53	-26.81	0.05	-37.42	-44.90
2,790.0	2,788.72	0.18	111.45	-26.76	0.16	-37.34	-44.72
2,970.0	2,968.72	0.15	336.36	-26.69	0.17	-37.23	-44.55
3,151.0	3,149.72	0.10	70.41	-26.44	0.10	-36.96	-44.50
3,332.0	3,330.72	0.14	116.46	-26.56	0.06	-37.01	-44.15
3,512.0	3,510.72	0.23	155.30	-27.06	0.08	-37.44	-43.80
3,693.0	3,691.72	0.10	132.15	-27.55	0.08	-37.88	-43.53
3,874.0	3,872.72	0.22	344.66	-27.33	0.17	-37.65	-43.50
3,964.0	3,962.72	0.38	3.60	-26.87	0.21	-37.19	-43.53
4,006.0	4,004.72	0.92	352.19	-26.41	1.32	-36.72	-43.57

12/28/2014

Rig Name: H&P 348

Depth = 4,412.0 Progress = 512.0

06:00 CONTROL DRILL UPPER CURVE F/4064' T/4215'= 151 @ 37.75 FPH; WOB
 28K; RPM 65; GPM 550; PP 1700 PSI; DIFF 270; P/U 104; S/O 96; R/T 99; ON
 BTM TQ 7 OFF BTM TQ 1; SAFETY HUDDLE DISCUSS OPERATION IN COLD
 WEATHER;

10:00 CONTROL DRILL UPPER CURVE F/4215' T/4395'= 180 @ 45 FPH; WOB 28K;
 RPM 65; GPM 550; PP 1760 PSI; DIFF 200; P/U 115; S/O 96; R/T 100; ON BTM
 TQ 5 OFF BTM TQ 1; SAFETY HUDDLE DISCUSS 45' BUFFER ZONE;

14:00 CONTROL DRILL UPPER CURVE F/4395' T/4412'= 17 @ 17 FPH; WOB 28K;
 RPM 65; GPM 550; PP 1760 PSI; DIFF 180; P/U 115; S/O 96; R/T 100; ON BTM
 TQ 6 OFF BTM TQ 1; SAFETY HUDDLE DISCUSS MIXING CHEMICALS;

15:00 CIRC HOLE CLEAN DUE TO NOT GETTING NEEDED DLS;

16:00 TOH F/4412' T/BHA; PULL ROT HEAD; L/D DIRECTIONAL ASSY & BIT; P/U
 NEW BHA & BIT; TEST; INSTALL ROT HEAD & TIH T/4412'; SAFETY
 HUDDLE DISCUSS M/U BIT W/SCORPION; PROPER HAND PLACEMENT;

02:00 CONTROL DRILL UPPER CURVE F/4412' T/4576'= 164 @ 41 FPH; WOB 35K;
 RPM 65; GPM 525; PP 1600 PSI; DIFF 200; P/U 110; S/O 96; R/T 100; ON BTM
 TQ 7 OFF BTM TQ 2;

Vis (s/qt): 29, Dens (lb/gal): 10.10, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	Vert Sec (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
4,039.0	4,037.69	3.45	345.01	-25.15	7.70	-35.50	-43.86
4,069.0	4,067.58	5.92	350.07	-22.71	8.34	-33.10	-44.36

4,099.0	4,097.33	8.68	349.91	-18.90	9.20	-29.35	-45.02
4,129.0	4,126.82	12.24	351.47	-13.47	11.90	-23.98	-45.89
4,159.0	4,155.95	15.21	350.90	-6.37	9.91	-16.95	-46.98
4,190.0	4,185.74	16.84	351.57	2.17	5.29	-8.49	-48.28
4,220.0	4,214.27	19.15	354.67	11.39	8.33	0.71	-49.37
4,250.0	4,242.38	21.69	355.24	21.76	8.49	11.13	-50.29
4,280.0	4,270.07	23.51	354.80	33.19	6.09	22.61	-51.29
4,310.0	4,297.30	26.10	354.96	45.66	8.64	35.14	-52.41
4,340.0	4,324.01	28.05	356.61	59.17	6.96	48.75	-53.41
4,370.0	4,350.23	30.10	356.92	73.55	6.85	63.30	-54.23
4,400.0	4,375.73	33.40	356.99	89.11	11.00	79.06	-55.07
4,430.0	4,400.44	35.64	354.24	105.94	9.09	96.00	-56.38
4,460.0	4,424.40	38.33	353.00	123.87	9.30	113.93	-58.39
4,490.0	4,447.38	41.61	353.77	143.03	11.06	133.07	-60.61
4,520.0	4,469.23	44.87	355.09	163.43	11.28	153.52	-62.60
4,551.0	4,490.49	48.46	356.07	185.75	11.81	175.99	-64.33

12/29/2014

Rig Name: H&P 348

Depth = 5,731.0 Progress = 1155.0

06:00 DRILL UPPER CURVE F/4576' T/4670'= 94' @ 31.3 FPH; GPM 525; WOB 35; RPM 65; DIFF 300; PP 1600; P/U 114; S/O 99; R/T 104; ON BTM TQ 6; OFF BTM TQ 2; SAFETY HUDDLE DISCUSS FORKLIFT PERMITS;

09:00 DOWNLINK & DISCUSS TANGENT W/MANAGEMENT;

10:00 DRILL TANGENT F/4670' T/4820'= 150' W/FORCES APPLIED; GOOD SURVEYS F/4688' T/4810'=122'; @ 42 FPH; GPM 525; WOB 35; RPM 65; DIFF 220; PP 1670; P/U 115; S/O 99; R/T 104; ON BTM TQ 5; OFF BTM TQ 2; SAFETY HUDDLE DISCUSS PROPER PPE FOR PRESSURE WASHING; CLOSED LOOP 1 HR NO GAINS/LOSSES;

13:30 DRILL LOWER CURVE F/4820' T/5002'= 182' @ 45.5 FPH; GPM 525; WOB 35; RPM 65; DIFF 180; PP 1790; P/U 117; S/O 99; R/T 106; ON BTM TQ 6; OFF BTM TQ 2; SAFETY HUDDLE DISCUSS LOCK OUT/TAG OUT;

17:30 RIG SERVICE

18:00 DRILL LOWER CURVE F/5002' T/5147'= 145' @ 48 FPH; GPM 500; WOB 35; RPM 80; DIFF 220; PP 1790; P/U 117; S/O 101; R/T 106; ON BTM TQ 8; OFF BTM TQ 2; SAFETY HUDDLE DISCUSS PROPER LIFTING TECHNIQUE;

21:00 DRILL LATERAL F/5147' T/5364'= 217' @ 54 FPH; GPM 550; WOB 35; RPM 65; DIFF 300; PP 2100; P/U 115; S/O 100; R/T 105; ON BTM TQ 12; OFF BTM TQ 4; SAFETY HUDDLE DISCUSS H2S EVACUATION PROCEDURE;

01:00 DRILL LATERAL F/5364' T/5731'= 367' @ 73.4 FPH; GPM 600; WOB 35; RPM 65; DIFF 250; PP 2700; P/U 122; S/O 101; R/T 111; ON BTM TQ 12; OFF BTM TQ 5; SAFETY HUDDLE DISCUSS PROCEDURES FOR FIRE;

Vis (s/qt): 29, Dens (lb/gal): 10.00, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	Vert Sec (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
4,582.0	4,510.29	52.10	357.02	209.28	11.98	199.78	-65.76

4,611.0	4,527.73	53.93	357.24	232.12	6.34	222.91	-66.92
4,641.0	4,544.64	57.41	357.14	256.52	11.60	247.64	-68.13
4,673.0	4,561.03	60.92	357.35	283.58	10.98	275.07	-69.45
4,688.0	4,568.27	61.39	357.35	296.53	3.13	288.19	-70.06
4,718.0	4,582.64	61.35	357.25	322.47	0.32	314.49	-71.30
4,748.0	4,597.02	61.35	357.25	348.41	0.00	340.79	-72.56
4,779.0	4,611.89	61.31	357.03	375.23	0.64	367.96	-73.92
4,810.0	4,626.80	61.20	356.67	402.05	1.08	395.10	-75.41
4,825.0	4,633.95	61.84	356.73	415.07	4.28	408.26	-76.17
4,856.0	4,647.79	65.09	356.70	442.43	10.48	435.94	-77.76
4,886.0	4,659.65	68.33	357.09	469.61	10.87	463.44	-79.25
4,917.0	4,670.25	71.66	357.42	498.30	10.79	492.52	-80.64
4,946.0	4,678.73	74.32	357.90	525.58	9.31	520.22	-81.77
4,977.0	4,686.41	76.99	358.56	555.08	8.86	550.23	-82.70
5,007.0	4,692.54	79.44	359.12	583.87	8.37	579.58	-83.29
5,038.0	4,697.81	81.00	359.07	613.78	5.03	610.12	-83.77
5,069.0	4,702.08	83.15	358.75	643.87	7.01	640.81	-84.35
5,099.0	4,705.14	85.15	358.20	673.16	6.91	670.64	-85.14
5,130.0	4,706.98	88.06	357.32	703.60	9.81	701.55	-86.35
5,160.0	4,707.37	90.46	357.76	733.13	8.13	731.51	-87.64
5,252.0	4,706.98	90.03	357.28	823.72	0.70	823.42	-91.62
5,344.0	4,706.91	90.06	356.02	914.54	1.37	915.26	-97.00
5,435.0	4,707.04	89.78	353.04	1,004.82	3.29	1,005.81	-105.67
5,527.0	4,707.29	89.91	350.17	1,096.55	3.12	1,096.80	-119.10
5,618.0	4,707.39	89.97	347.15	1,187.51	3.32	1,185.99	-136.99

12/30/2014

Rig Name: H&P 348

Depth = 7,934.0 Progress = 2203.0

- 06:00 DRILL LATERAL F/5731' T/6057'= 326' @ 81.5 FPH; GPM 575; WOB 35; RPM 75; DIFF 380; PP 2670; P/U 130; S/O 103; R/T 114; ON BTM TQ 13; OFF BTM TQ 4; SAFETY HUDDLE DISCUSS ICE CONDITIONS ON RIG FLOOR;
- 10:00 DRILL LATERAL F/6057' T/6444'= 387' @ 96.75 FPH; GPM 600; WOB 35; RPM 75; DIFF 380; PP 2800; P/U 135; S/O 103; R/T 121; ON BTM TQ 15; OFF BTM TQ 4; SAFETY HUDDLE DISCUSS KEEP UP W/WIND DIRECTION IN H2S SITUATIONS; CLOSED LOOP 1 HR NO GAINS/LOSSES;
- 14:00 DRILL LATERAL F/6444' T/6534'= 90' @ 180 FPH; GPM 600; WOB 35; RPM 75; DIFF 380; PP 2930; P/U 135; S/O 103; R/T 121; ON BTM TQ 13; OFF BTM TQ 4;
- 14:30 RIG SERVICE
- 15:00 DRILL LATERAL F/6534' T/6831'= 297' @ 99 FPH; GPM 600; WOB 35; RPM 75; DIFF 440; PP 2930; P/U 135; S/O 103; R/T 121; ON BTM TQ 13; OFF BTM TQ 4; SAFETY HUDDLE DISCUSS I OPERATE ONE PIECE OF EQUIPMENT AT A TIME;
- 18:00 DRILL LATERAL F/6831' T/7210'= 379' @ 94.75 FPH; GPM 600; WOB 35; RPM 75; DIFF 440; PP 2930; P/U 137; S/O 101; R/T 123; ON BTM TQ 16; OFF BTM TQ 7; SAFETY HUDDLE DISCUSS CELL PHONE POLICY;

22:00 DRILL LATERAL F/7210' T/7565'= 355' @ 88.75 FPH; GPM 600; WOB 35; RPM 75; DIFF 260; PP 3000; P/U 138; S/O 103; R/T 123; ON BTM TQ 17; OFF BTM TQ 8; SAFETY HUDDLE DISCUSS CHECKING EQUIPMENT REGULARLY;

02:00 DRILL LATERAL F/7565' T/7934'= 369' @ 92.25 FPH; GPM 600; WOB 35; RPM 75; DIFF 330; PP 3000; P/U 136; S/O 105; R/T 124; ON BTM TQ 17; OFF BTM TQ 8; SAFETY HUDDLE DISCUSS CIRCULATING EQUIPMENT DURING FREEZING WEATHER;

Vis (s/qt): 28, Dens (lb/gal): 10.00, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	Vert Sec (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
5,709.0	4,707.29	90.15	346.07	1,278.49	1.20	1,274.51	-158.06
5,801.0	4,706.60	90.71	345.37	1,370.44	0.97	1,363.66	-180.75
5,892.0	4,705.96	90.09	346.60	1,461.40	1.51	1,451.94	-202.79
5,982.0	4,705.58	90.40	345.23	1,551.35	1.56	1,539.23	-224.69
6,058.0	4,704.97	90.52	343.39	1,627.23	2.43	1,612.39	-245.24
6,148.0	4,704.05	90.65	342.26	1,716.92	1.26	1,698.37	-271.81
6,239.0	4,703.19	90.43	341.21	1,807.46	1.18	1,784.78	-300.33
6,329.0	4,702.49	90.46	339.39	1,896.74	2.02	1,869.50	-330.67
6,419.0	4,701.91	90.28	339.05	1,985.80	0.43	1,953.64	-362.60
6,509.0	4,701.47	90.28	337.67	2,074.65	1.53	2,037.29	-395.79
6,600.0	4,700.93	90.40	341.42	2,164.73	4.12	2,122.50	-427.59
6,690.0	4,700.71	89.88	342.31	2,254.29	1.15	2,208.03	-455.60
6,780.0	4,701.00	89.75	342.40	2,343.93	0.18	2,293.80	-482.88
6,870.0	4,701.20	90.00	342.32	2,433.58	0.29	2,379.57	-510.15
6,961.0	4,701.03	90.22	343.29	2,524.27	1.09	2,466.50	-537.05
7,051.0	4,700.83	90.03	344.25	2,614.08	1.09	2,552.91	-562.20
7,141.0	4,700.56	90.31	344.88	2,703.96	0.77	2,639.66	-586.15
7,231.0	4,700.14	90.22	346.68	2,793.90	2.00	2,726.89	-608.26
7,322.0	4,699.79	90.22	347.73	2,884.90	1.15	2,815.63	-628.41
7,412.0	4,699.37	90.31	349.12	2,974.88	1.55	2,903.79	-646.47
7,502.0	4,698.95	90.22	349.56	3,064.83	0.50	2,992.24	-663.12
7,592.0	4,698.37	90.52	349.91	3,154.77	0.51	3,080.80	-679.16
7,682.0	4,697.99	89.97	350.57	3,244.66	0.95	3,169.49	-694.42
7,772.0	4,698.06	89.94	348.97	3,334.58	1.78	3,258.05	-710.40
7,863.0	4,698.26	89.81	348.69	3,425.55	0.34	3,347.33	-728.03

12/31/2014

Rig Name: H&P 348

Depth = 9,350.0 Progress = 1416.0

06:00 DRILL LATERAL F/7934' T/8249'= 315' @ 78.75 FPH; GPM 600; WOB 35; RPM 75; DIFF 440; PP 3000; P/U 136; S/O 105; R/T 123; ON BTM TQ 16; OFF BTM TQ 8; (ANN 1140 MAN 1560 ACC 2960)

10:00 DRILL LATERAL F/8249' T/8520'= 271' @ 68 FPH; GPM 600; WOB 35; RPM 75; DIFF 250; PP 3100; P/U 137; S/O 105; R/T 125; ON BTM TQ 16; OFF BTM TQ 6; (CLOSE LOOP FOR 1 HOUR NO GAINS OR LOSSES)

14:00 DRILL LATERAL F/8520' T/8790'= 270' @ 77 FPH; GPM 600; WOB 35; RPM 75; DIFF 380; PP 3190; P/U 142; S/O 105; R/T 126; ON BTM TQ 17; OFF BTM TQ 9;

17:30 SERVICE RIG

18:00 DRILL LATERAL F/8790' T/9099'= 309' @ 77 FPH; GPM 600; WOB 35; RPM 75; DIFF 330; PP 3190; P/U 142; S/O 105; R/T 126; ON BTM TQ 17; OFF BTM TQ 9; (ANN 1250 MAN 1460 ACC 2750)(DISCUSSED BROKE LEG INCIDENT ON H&P 461)

22:00 DRILL LATERAL F/9099' T/9350 TD'= 251' @ 71 FPH; GPM 600; WOB 35; RPM 75; DIFF 330; PP 3190; P/U 142; S/O 105; R/T 126; ON BTM TQ 19; OFF BTM TQ 10; (CLOSE LOOP FOR 1 HOUR NO GAINS OR LOSSES)

01:30 TAKE SURVEY; SEND DOWN LINK TO PUT TOOL IN CENTER MODE;

02:00 CIRCULATE & CONDITION HOLE; PUMPED 4- 40 BBL 60 VIS SWEEPS; LAYING DOWN 1 JT OF PIPE EVERY 30 MIN

Vis (s/qt): 28, Dens (lb/gal): 10.10, pH: 10.0

MD (ft)	TVD (ft)	Incl (°)	Azi (°)	Vert Sec (ft)	DLS (°/100ft)	N/S (ft)	E/W (ft)
7,953.0	4,698.58	89.94	348.74	3,515.78	0.15	3,435.84	-745.63
8,043.0	4,698.68	89.94	346.80	3,605.77	2.16	3,523.79	-764.70
8,134.0	4,698.31	90.52	343.20	3,696.67	4.01	3,611.67	-788.25
8,224.0	4,697.61	90.37	346.14	3,786.55	3.27	3,698.46	-812.05
8,314.0	4,697.03	90.37	349.28	3,876.53	3.49	3,786.38	-831.20
8,405.0	4,696.42	90.40	348.65	3,967.50	0.69	3,875.70	-848.62
8,495.0	4,695.77	90.43	345.84	4,057.49	3.13	3,963.46	-868.49
8,585.0	4,695.04	90.49	351.01	4,147.44	5.75	4,051.60	-886.54
8,675.0	4,694.17	90.62	351.28	4,237.26	0.33	4,140.52	-900.40
8,765.0	4,693.37	90.40	348.98	4,327.15	2.57	4,229.18	-915.83
8,855.0	4,692.62	90.55	348.07	4,417.13	1.03	4,317.38	-933.74
8,946.0	4,691.86	90.40	346.24	4,508.12	2.01	4,406.09	-953.97
9,036.0	4,691.33	90.28	345.67	4,598.09	0.65	4,493.40	-975.80
9,126.0	4,691.13	89.97	345.43	4,688.04	0.43	4,580.56	-998.26
9,216.0	4,691.09	90.09	347.85	4,778.02	2.69	4,668.11	-1,019.05
9,306.0	4,691.01	90.00	350.08	4,867.99	2.47	4,756.44	-1,036.28
9,325.0	4,690.99	90.12	349.26	4,886.97	4.32	4,775.14	-1,039.68
9,350.0	4,690.94	90.12	349.26	4,911.96	0.00	4,775.14	-1,044.34

01/01/2015

Rig Name: H&P 348

Depth = 9,350.0 Progress = 0.0

06:00 CIRCULATE & CONDITION HOLE

08:30 THAW OUT AIR COMPRESSOR & PIPE WRANGLER WHILE CIRCULATING

10:30 LDDS F/9350 T/8520

11:30 BLOW DOWN LINES (WINTERIZING)

12:00 LDDS F/8520' T/450';

21:00 SERVICE RIG

21:30 DIESEL VALVE WAS CLOSE CAUSING GENERATORS TO DIE; ONCE GOT GENERATORS PRIMED BACK UP AND EVERYTHING RESET; TROUBLE SHOOT HPU UNIT W/ELECTRICIAN; CHANGED OUT DIFFERENT VALVES

AND COMMUNICATION CARDS TO GET WORKING PROPERLY;
03:00 LDDS F/450' T/SURFACE; LAID DOWN DIRECTIONAL TOOLS; BREAK BIT
WIT SCORPION; GRADE 2-2-1-1-1-1-1;
04:30 CLEAN FLOOR & REMOVE WEAR BUSHING
05:30 PICK UP CRT TOOL & CASING EQUIPMENT

01/02/2015

Rig Name: H&P 348

Depth = 9,350.0 Progress = 0.0

06:00 SERVICE RIG
06:30 RIG UP CRT TOOL & HYDRAULIC SLIPS; PERFORMED 2 POINT
CALIBRATION ON EQUIPMENT & FUNCTION TEST (GOOD)
08:00 M/U SHOE TRACK & CIRCULATE; RAN 7 JOINTS 5.5 17# L-80 BTC CASING;
10:30 CHANGED ENCODER ON TOP DRIVE & RESET PARAMETERS
11:00 RUN 220 JOINTS 5.5 17# L-80 BTC CASING SHOE @ 9332'; FC 9287'; TT SUB
9199'; MJ1 7231; MJ2 3963' CENTRALIZERS AS INSTRUCTED;
00:00 CIRCULATE & WAITING ON HALLIBURTON DUE TO WEATHER & ROAD
CONDITIONS (1- MUD PUMP 160 STROKES @ 375 GPM; WORKING PIPE 5'
EVERY HOUR; SWEEPING HOLE 10 BBL 60 VIS EVERY 6 HOURS;

Vis (s/qt): 28, Dens (lb/gal): 10.10, pH: 10.0

01/03/2015

Rig Name: H&P 348

Depth = 9,350.0 Progress = 0.0

06:00 CIRCULATE & WAITING ON HALLIBURTON DUE TO WEATHER & ROAD
CONDITIONS (1- MUD PUMP 160 STROKES @ 375 GPM; WORKING PIPE 5'
EVERY HOUR; SWEEPING HOLE 10 BBL 60 VIS EVERY 6 HOURS;

01/04/2015

Rig Name: H&P 348

Depth = 9,350.0 Progress = 0.0

06:00 CIRCULATE & WAITING ON HALLIBURTON DUE TO WEATHER & ROAD
CONDITIONS (1- MUD PUMP 160 STROKES @ 375 GPM; WORKING PIPE 5'
EVERY HOUR; SWEEPING HOLE 10 BBL 60 VIS EVERY 6 HOURS;
12:00 CIRCULATE & WAITING ON HALLIBURTON DUE TO LOADING
CEMENT, DRIVE TIME, WAITING ON DRIVERS; (1- MUD PUMP 160
STROKES @ 375 GPM; WORKING PIPE 5' EVERY HOUR; SWEEPING HOLE
10 BBL 60 VIS EVERY 6 HOURS;

Vis (s/qt): 28, Dens (lb/gal): 10.10, pH: 9.5

01/05/2015

Rig Name: H&P 348

Depth = 9,350.0 Progress = 0.0

06:00 CIRCULATE & WAITING ON HALLIBURTON DUE TO LOADING
CEMENT, DRIVE TIME, WAITING ON DRIVERS; (1- MUD PUMP 160

STROKES @ 375 GPM; WORKING PIPE 5' EVERY HOUR; SWEEPING HOLE
10 BBL 60 VIS EVERY 6 HOURS;

- 10:30 SAFETY MEETING ON CEMENTING CASING & RIG UP CEMENTERS
- 11:00 TEST LINES T/2500 PSI;PUMP 20 FRESH WATER SPACER; 20 BBL GEL RED
DYE SPACER; PUMP 1ST LEAD: 287 BBLS, 575 SKS, 11.5 PPG; PUMPED 2ND
LEAD: 56 BBL, 190 SKS, 13.2 PPG; PUMP TAIL: 299 BBLS, 1290 SKS, 14.2 PPG;
DROPPED PLUG & DISPLACED W/12 BBLS FRESH WATER; W/48 BBLS
MSA; 155 BBLS FRESH WATER; BUMPED PLUG @ 4 BPM @ 1443 PSI &
HELD @ 2200 PSI FOR 5 MINS; FLOAT HELD W/ 2 BBLS BACK;
CIRCULATED 130 SACK 65 BBLS CEMENT TO SURFACE;
- 15:00 RIG DOWN CEMENTERS & FLUSH LINES, VALVES, SHAKER
- 16:00 NIPPLE DOWN & CLEAN PITS; SET SLIPS 100,000; CUT OFF & INSTALL B-
SECTION & TEST TO 5000 PSI FOR 10 MIN;
- 23:00 RIG DOWN CRT TOOL; RELEASE RIG @ 00:00;