

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Moore 1-23C4					
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT UNDESIGNATED					
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME					
6. NAME OF OPERATOR EP ENERGY E&P COMPANY, L.P.						7. OPERATOR PHONE 713 997-5038					
8. ADDRESS OF OPERATOR 1001 Louisiana, Houston, TX, 77002						9. OPERATOR E-MAIL maria.gomez@epenergy.com					
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) Fee			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>					
13. NAME OF SURFACE OWNER (if box 12 = 'fee') Donna J. Moore						14. SURFACE OWNER PHONE (if box 12 = 'fee') 3072567443					
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') P.O. Box 148, ,						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')					
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>					
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN			
LOCATION AT SURFACE		800 FSL 800 FEL		SESE	23	3.0 S	4.0 W	U			
Top of Uppermost Producing Zone		800 FSL 800 FEL		SESE	23	3.0 S	4.0 W	U			
At Total Depth		800 FSL 800 FEL		SESE	23	3.0 S	4.0 W	U			
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 800			23. NUMBER OF ACRES IN DRILLING UNIT 640					
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 5280			26. PROPOSED DEPTH MD: 11000 TVD: 11000					
27. ELEVATION - GROUND LEVEL 5871			28. BOND NUMBER 400JU0708			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Duchesne City/East Duchesne Water District					
Hole, Casing, and Cement Information											
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight	
Cond	20	13.375	0 - 800	54.5	J-55 LT&C	8.8	Class G	1000	1.15	15.8	
Surf	12.25	9.625	0 - 2730	40.0	N-80 LT&C	9.5	35/65 Poz	340	3.16	11.0	
							Premium Lite High Strength	191	1.33	14.2	
I1	8.75	7	0 - 8500	29.0	P-110 LT&C	10.5	Premium Lite High Strength	376	2.31	12.0	
							Premium Lite High Strength	91	1.91	12.5	
L1	6.125	4.5	8300 - 11000	13.5	P-110 LT&C	12.0	50/50 Poz	200	1.61	12.3	
ATTACHMENTS											
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES											
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN						
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER						
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP						
NAME Maria S. Gomez			TITLE Principal Regulatory Analyst			PHONE 713 997-5038					
SIGNATURE			DATE 09/21/2012			EMAIL maria.gomez@epenergy.com					
API NUMBER ASSIGNED 43013517360000			APPROVAL  Permit Manager								

**Moore 1-23C4
Sec. 23, T3S, R4W
DUCHESNE COUNTY, UT**

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers

<u>Formation</u>	<u>Depth</u>
Green River (GRRV)	2,733'
Green River (GRTN1)	4,648'
Mahogany Bench	5,548'
L. Green River	6,838'
Wasatch	8,608'
T.D. (Permit)	11,000'

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River (GRRV)	2,733'
	Green River (GRTN1)	4,648'
	Mahogany Bench	5,548'
Oil	L. Green River	6,838'
Oil	Wasatch	8,608'

3. Pressure Control Equipment: (Schematic Attached)

A 4.5" by 20.0" rotating head on structural pipe from surface to 800'. A 4.5" by 13 3/8" Smith Rotating Head and 5M Annular from 800' to 2,730' on Conductor. A 5M BOP stack, 5M Annular, and 5M kill lines and choke manifold used from 2,730' to 8,500'. A 10M BOE w/rotating head, 5M annular, blind rams & mud cross from 8,500' to TD. The BOPE and related equipment will meet the requirements of the 5M and 10M system.

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi Annular will be nipped up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the greater of 1500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock, floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test and 4,000 psi high test. The 10M BOP will be installed

with 3 ½" pipe rams, blind rams, mud cross and rotating head from intermediate shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

Statement on Accumulator System and Location of Hydraulic Controls:

Precision Rig # 404 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

Auxiliary Equipment:

- A) Pason monitoring systems with gas monitor 800' – TD.
- B) Mud logger with gas monitor – 2,730' to TD
- C) Choke manifold with one manual and one hydraulic operated choke
- D) Full opening floor valve with drill pipe thread
- E) Upper and lower Kelly cock
- F) Shaker, de-sander and de-silter, and centrifuge.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Wellbore Diagram.

All casing will meet or exceed the following design safety factors:

- Burst = 1.00
- Collapse = 1.125
- Tension = 1.2 (including 100k# overpull)

Cement design calculations will be based on: 25% excess over gauge hole in the liner section, 10% excess over gauge hole in the intermediate section, and 75% excess on the lead and 50% excess on the tail over gauge hole volume for the surface hole. Actual volumes pumped will be a minimum of the volumes stated above, however, actual hole size will be based on caliper logs in the liner and intermediate sections. Gauge hole will be used for the surface section.

5. **Drilling Fluids Program:**

Proposed Mud Program:

Interval	Type	Mud Weight
Surface	Air	8.8 – 9.5
Intermediate	WBM	9.5 – 10.5
Production	WBM	10.5 – 12.0

Anticipated mud weights are based on actual offset well bottom-hole pressure data. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program:**

Logs:

Mud Log: 2,730' - TD.

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from base of surface casing to TD.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 11,000' TD equals approximately 6,864 psi. This is calculated based on a 0.624 psi/foot gradient (12.0 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 4,444 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 8,500' = 6,800 psi

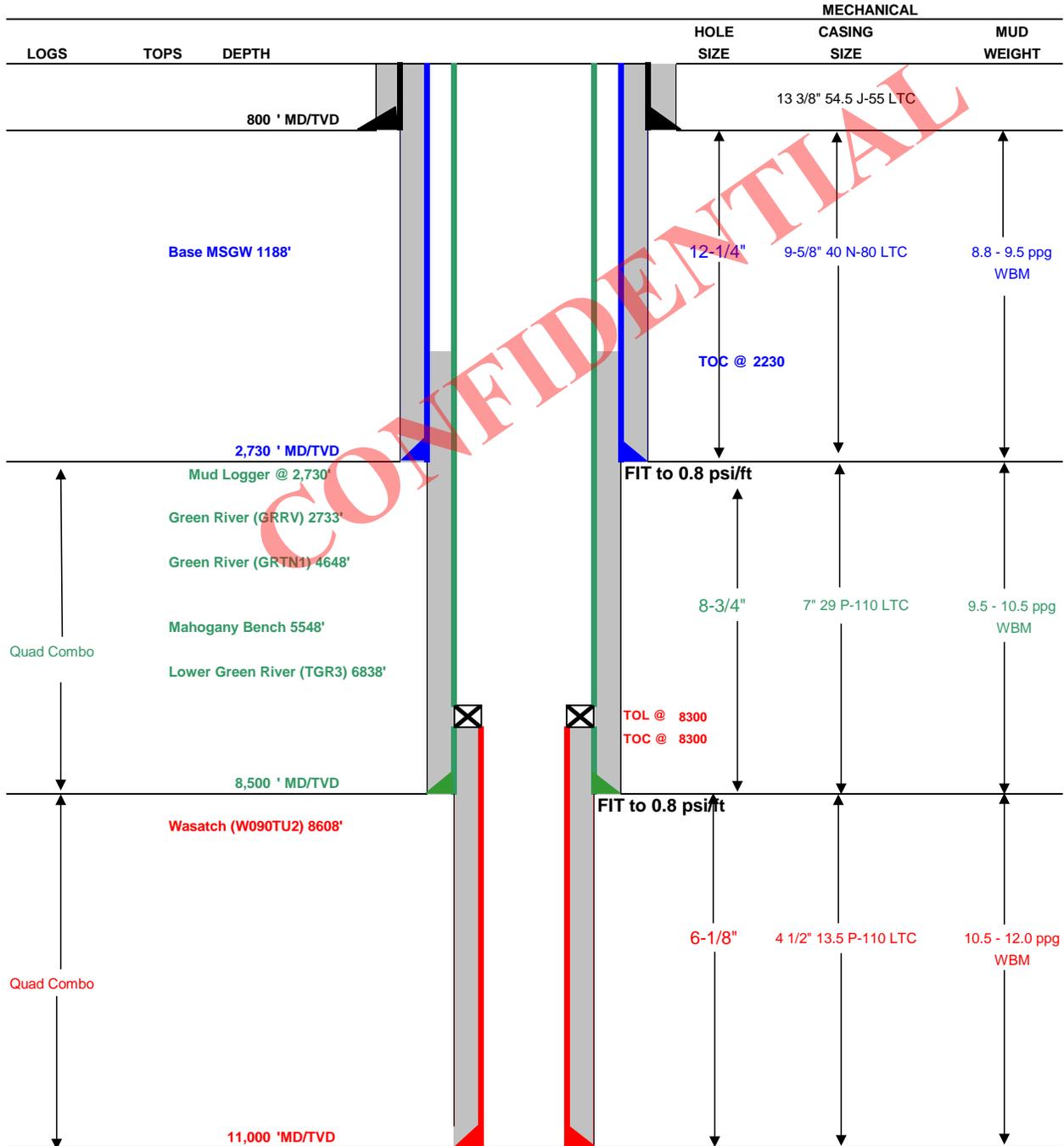
BOPE and casing design will be based on the lesser of the two MASPs which is 4,444 psi.

8. **OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.**



Drilling Schematic

Company Name: EP ENERGY	Date: September 19, 2012
Well Name: Moore 1-23C4	TD: 11,000
Field, County, State: Altamont - Bluebell, Duchesne, Utah	AFE #:
Surface Location: Sec 23 T3S R4W 800' FSL 800' FEL	BHL: Straight Hole
Objective Zone(s): Green River, Wasatch	Elevation: 5870'
Rig: Precision 404	Spud (est.):
BOPE Info: 5.0 x 13 3/8 rotating head from 800' to 2,730' 11 5M BOP stack and 5M kill lines and choke manifold used from 2,730' to 8,500' 11 10M BOE w/rotating head, 5M annular, 3.5 rams, blind rams & mud cross from 8,500' to TD	



DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	800	54.5	J-55	LTC	2,730	1,140	1,399
SURFACE	9-5/8"	0	2730	40.00	N-80	LTC	3,090	5,750	820
INTERMEDIATE	7"	0	8500	29.00	P-110	LTC	11,220	8,530	797
PRODUCTION LINER	4 1/2"	8300	11000	13.50	P-110	LTC	12,410	10,680	338

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		800	Class G + 3% CACL2	1000	100%	15.8 ppg	1.15
SURFACE	Lead	2,230	Boral Craig POZ 35%, Mountain G 65%, Bentonite Wyoming 8%, Silicate 5 lbm/sk, Pol-E Flake 0.125 lbm/sk, Kwik Seal 0.25 lb/sk	340	75%	11.0 ppg	3.16
	Tail	500	Halco-light premium+3 lb/sk Silicate+0.3% Econolite+1% Salt+0.25 lbm/sk Kol-Seal+0.24 lb/sk Kwik Seal+ HR-5	191	50%	14.2 ppg	1.33
INTERMEDIATE	Lead	5,270	Hallco-Light-Premium+4% Bentonite+0.4% Econolite+0.2% Halad322+3 lb/sk Silicalite Compacted+0.8% HR-5+ 0.125 lb/sk Poly-E-Flake	376	10%	12.0 ppg	2.31
	Tail	1,000	Halco-Light-Premium+0.2% Econolite+0.3% Versaset+0.2% Halad322+0.8% HR-5+ 0.3% SuperCBL+ 0.125 lb/sk Poly-E-Flake	91	10%	12.5 ppg	1.91
PRODUCTION LINER		2,700	Halco- 50/50 Poz Premium Cement+20% SSA-1+0.3% Super CBL+ 0.3% Halad-344+0.3% Halad-413+ 0.2% SCR-100+ 0.125 lb/sk Poly-E-Flake + 3 lb/sk Silicat	200	25%	12.30	1.61

FLOAT EQUIPMENT & CENTRALIZERS	
CONDUCTOR	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
SURFACE	PDC drillable guide shoe, 1 joint casing, PDC drillable float collar & Stage collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float equipment. Maker joint at 8,000'.
LINER	Float shoe, 1 joint, float collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S): Joe Cawthorn 713-997-5929MANAGER: Tommy Gaydos

EP ENERGY E&P COMPANY, L.P.
MOORE 1-23C4
SECTION 23, T3S, R4W, U.S.B.&M.

PROCEED NORTH ON PAVED STATE HIGHWAY 87 FROM THE INTERSECTION OF HIGHWAY 87 WITH U.S. HIGHWAY 40 IN DUCHESNE, UTAH APPROXIMATELY 3.53 MILES TO AN INTERSECTION;

TURN RIGHT AND TRAVEL EASTERLY 3.84 MILES ON EXISTING GRAVEL COUNTY ROAD TO AN INTERSECTION;

TURN RIGHT AND TRAVEL SOUTHEASTERLY 1.19 MILES ON EXISTING GRAVEL COUNTY ROAD TO THE BEGINNING OF THE PROPOSED ACCESS ROAD;

TURN RIGHT ONTO ACCESS ROAD AND FOLLOW FLAGS 0.20 MILES TO THE PROPOSED WELL LOCATION;

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 8.76 MILES.

EP ENERGY E & P COMPANY, L.P.

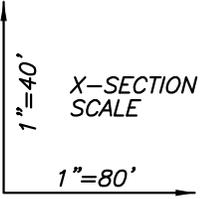
FIGURE #2

LOCATION LAYOUT FOR

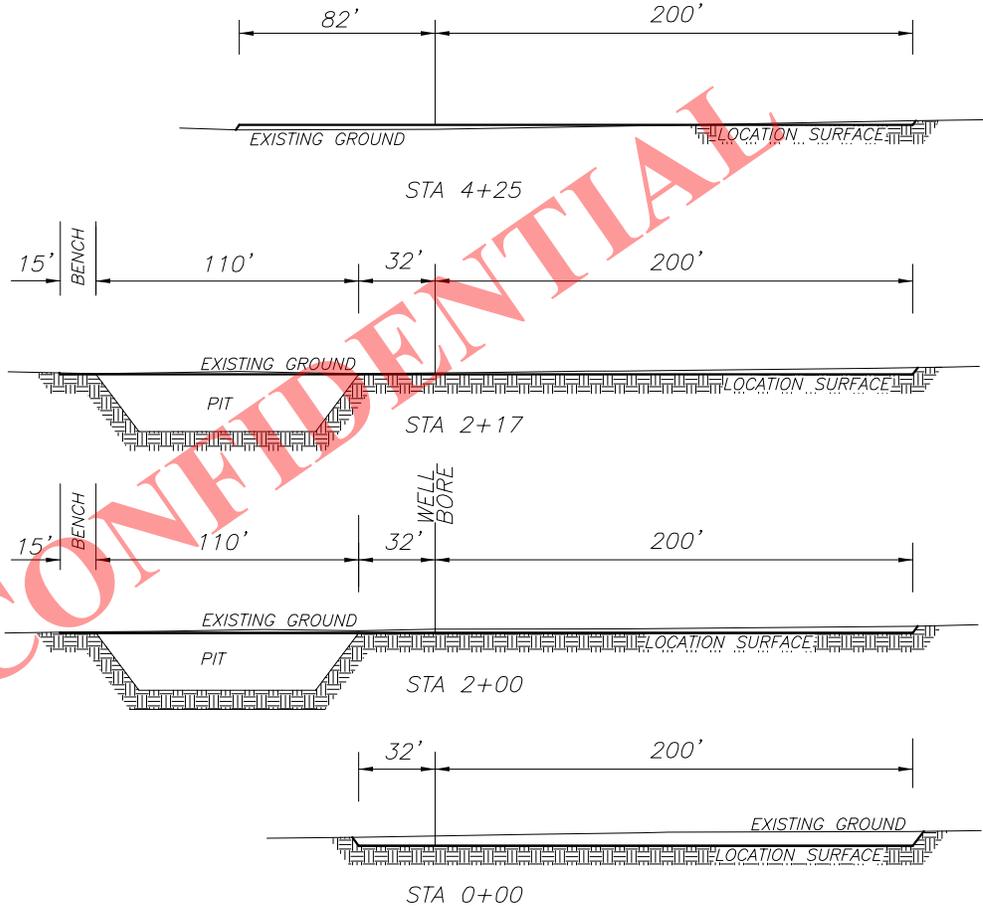
MOORE 1-23C4

SECTION 23, T3S, R4W, U.S.B.&M.

800' FSL, 800' FEL



NOTE: ALL CUT/FILL
SLOPES ARE 1½:1
UNLESS OTHERWISE
NOTED



APPROXIMATE QUANTITIES

TOTAL CUT (INCLUDING PIT) = 9888 CU. YDS.

PIT CUT = 4572 CU. YDS.

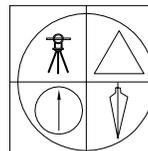
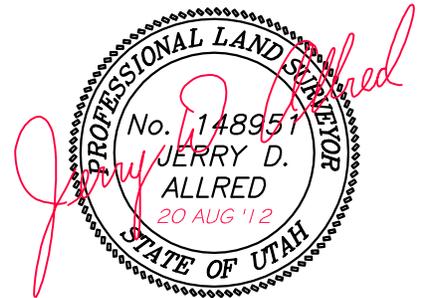
TOPSOIL STRIPPING: (6") = 2512 CU. YDS.

REMAINING LOCATION CUT = 2804 CU. YDS

TOTAL FILL = 786 CU. YDS.

LOCATION SURFACE GRAVEL=1374 CU. YDS. (4" DEEP)

ACCESS ROAD GRAVEL=266 CU. YDS.



JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

20 AUG 2012

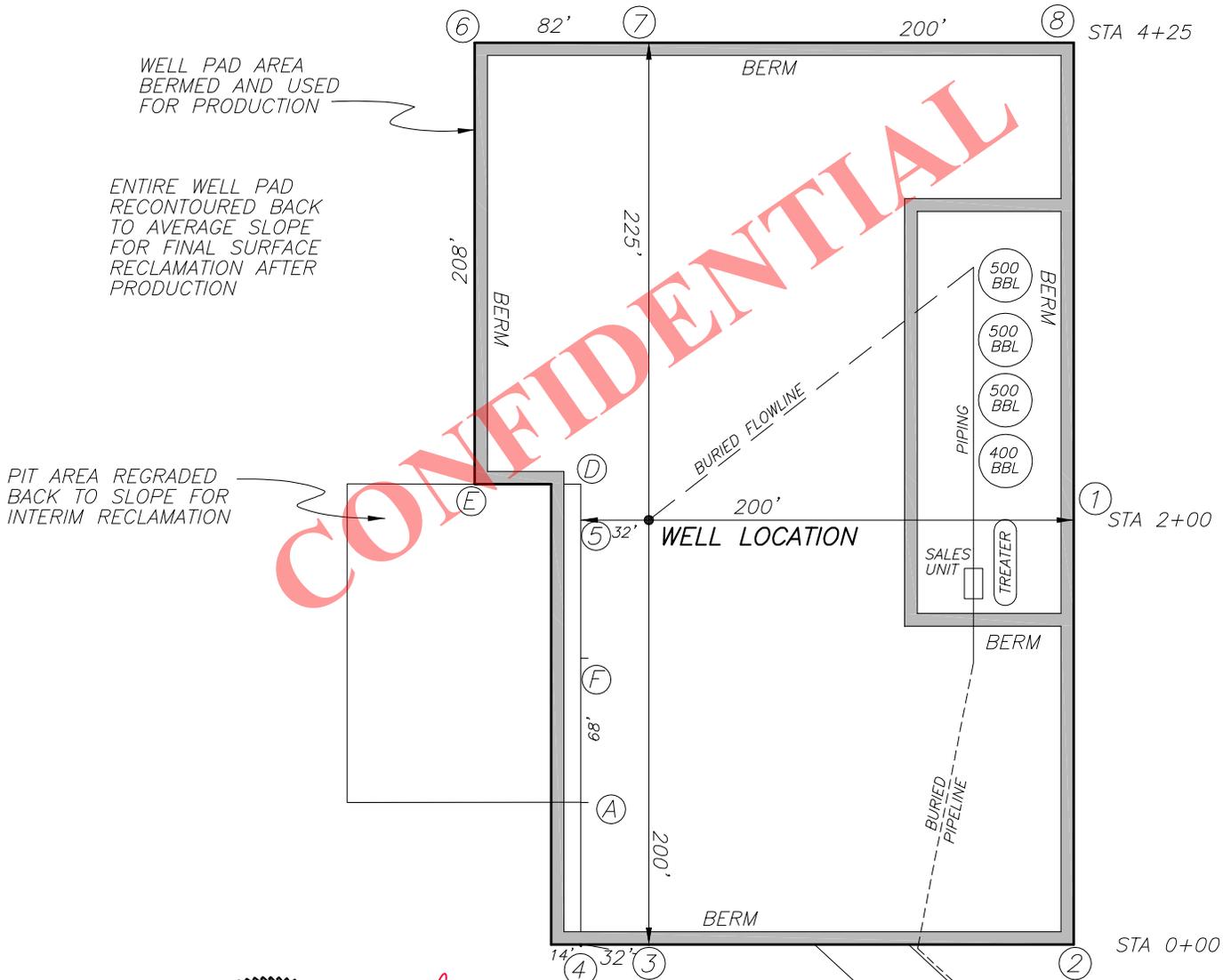
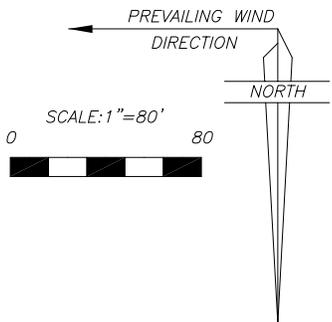
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EP ENERGY E & P COMPANY, L.P.

FIGURE #3

LOCATION LAYOUT FOR
 MOORE 1-23C4
 SECTION 23, T3S, R4W, U.S.B.&M.
 800' FSL, 800' FEL

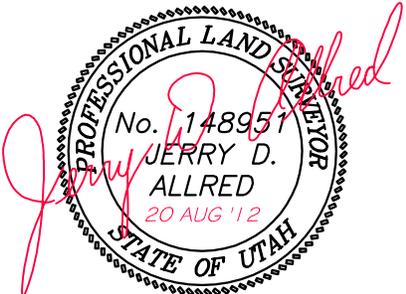


WELL PAD AREA
 BERMED AND USED
 FOR PRODUCTION

ENTIRE WELL PAD
 RECONTOURED BACK
 TO AVERAGE SLOPE
 FOR FINAL SURFACE
 RECLAMATION AFTER
 PRODUCTION

PIT AREA REGRADED
 BACK TO SLOPE FOR
 INTERIM RECLAMATION

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	JERRY D. ALLRED & ASSOCIATES SURVEYING CONSULTANTS
	1235 NORTH 700 EAST--P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738-5352

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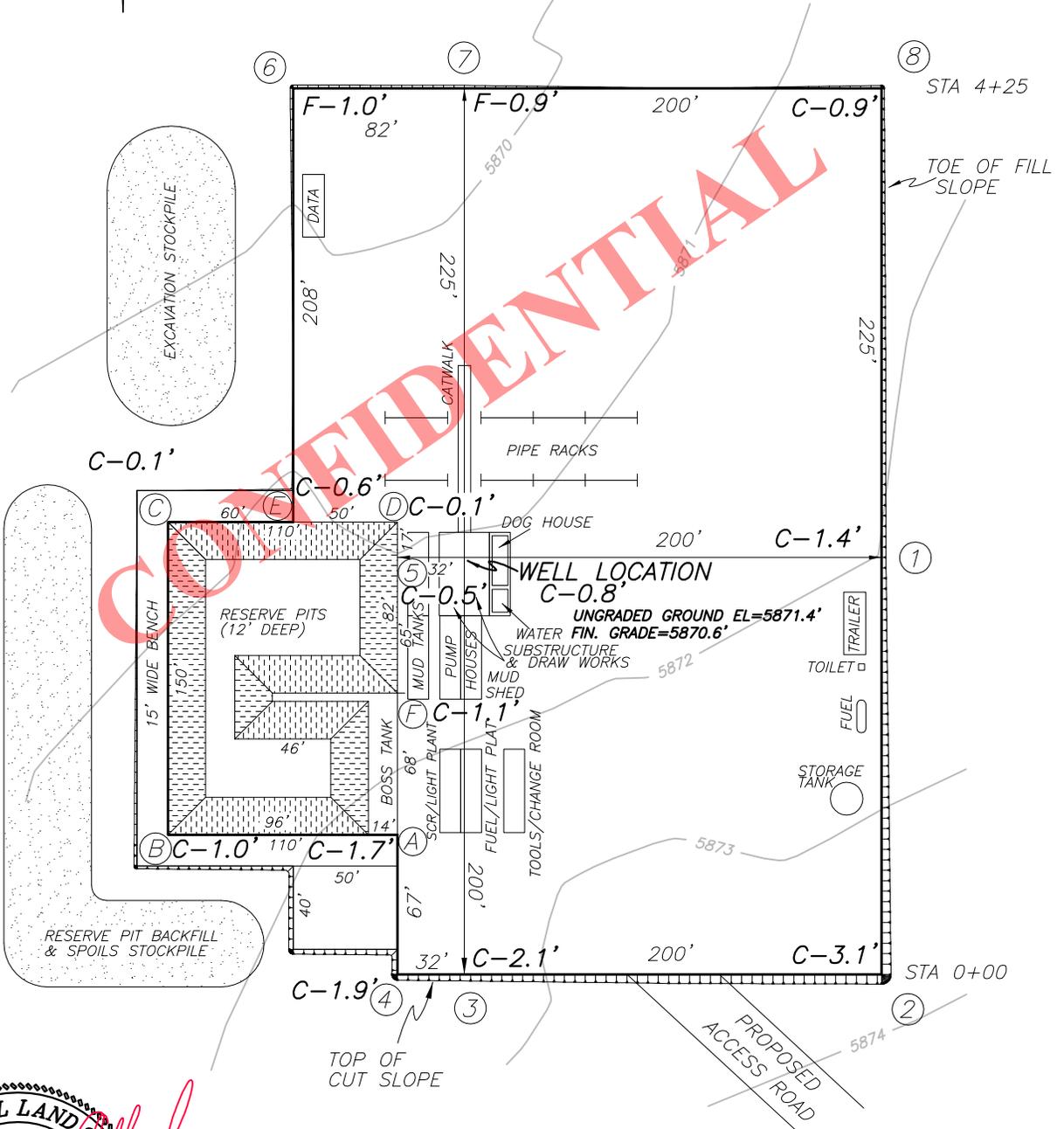
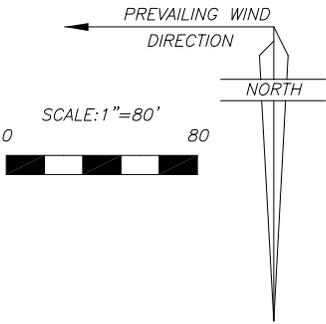
FIGURE #1

LOCATION LAYOUT FOR

MOORE 1-23C4

SECTION 23, T3S, R4W, U.S.B.&M.

800' FSL, 800' FEL



Jerry D. Allred
 PROFESSIONAL LAND SURVEYOR
 No. 148957
 JERRY D. ALLRED
 20 AUG '12
 STATE OF UTAH

20 AUG 2012 01-128-313

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1235 NORTH 700 EAST--P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738-5352	

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23

FOUND COUNTY MONUMENT WITH
BENT G.L.O. MONUMENT
ALONGSIDE AT QUARTER CORNER

LOCATION USE AREA AND ACCESS ROAD, POWER LINE, AND PIPELINE
CORRIDOR RIGHT-OF-WAY SURVEY FOR

EP ENERGY E&P COMPANY, L.P.
MOORE 1-23C4
SECTION 23, T3S, R4W, U.S.B.&M.
DUCHESE COUNTY, UTAH

USE AREA BOUNDARY DESCRIPTION

Commencing at the Southeast Corner of Section 23, Township 3 South, Range 4 West of the Uintah Special Base and Meridian;
Thence North 45°03'41" West 771.64 feet to the TRUE POINT OF BEGINNING;
Thence South 89°59'41" West 485.00 feet;
Thence North 00°00'19" West 485.00 feet;
Thence North 89°59'41" East 485.00 feet;
Thence South 00°00'19" East 485.00 feet to the TRUE POINT OF BEGINNING, containing 5.40 acres.

ACCESS ROAD, PIPELINE, AND POWER LINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 66 feet wide access road, pipeline, and power line corridor right-of-way over portions of Section 23, Township 3 South, Range 4 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows:
Commencing at the Southeast Corner of said Section 23;
Thence North 42°11'49" West 1390.33 feet to the TRUE POINT OF BEGINNING, said point being on the North line of the EP Energy E&P Co. Moore 1-23C4 well location surface use area boundary;
Thence North 47°15'11" West 493.25 feet;
Thence North 00°18'20" West 494.53 feet to the South line of a County Road, said right-of-way being 987.78 feet in length with the sidelines being shortened or elongated to intersect said use area boundary and said South Road line.

LINE	BEARING	DISTANCE
L1	S 89°59'41" W	485.00'
L2	N 00°00'19" W	485.00'
L3	N 89°59'41" E	485.00'
L4	S 00°00'19" E	485.00'
L5	N 47°15'11" W	493.25'
L6	N 00°18'20" W	494.53'

EP ENERGY E & P COMPANY, L.P.
SURFACE USE AREA
MOORE 1-23C4
5.40 ACRES

SW1/4SE1/4

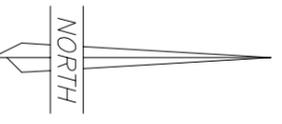
FOUND G.L.O. MONUMENT
AT QUARTER CORNER

S 89°59'57" E 2648.18'

SBC 23 SBC 24
SBC 26 SBC 25

LEGEND

▲ FOUND 1/2" REBAR AT LOT CORNERS



SCALE: 1"=400'



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SURVEYOR'S CERTIFICATE

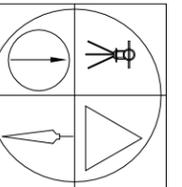
This is to certify that this plat was prepared from the field notes and electronic data collector files of an actual survey made by me, or under my personal supervision, of the use area and access road, power line, and pipeline corridor right-of-way shown hereon, and that the monuments indicated were found or set during said survey, and that this plat accurately represents said survey to the best of my knowledge.



Jerry D. Allred, Professional Land Surveyor,
Certificate 148951 (Utah)

THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT
THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE SECTION CORNER LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

20 AUG 2012 01-128-313

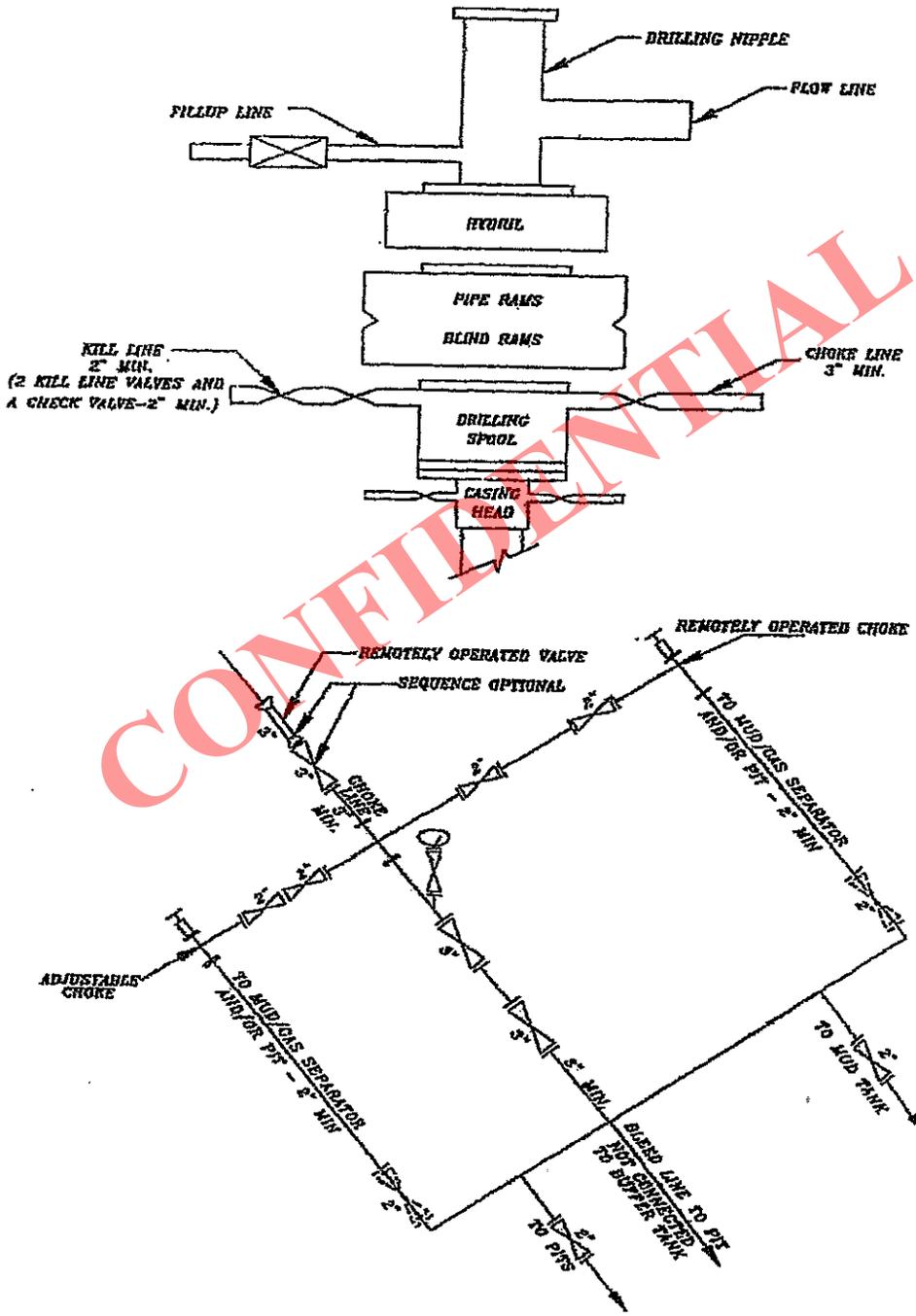


JERRY D. ALLRED AND ASSOCIATES

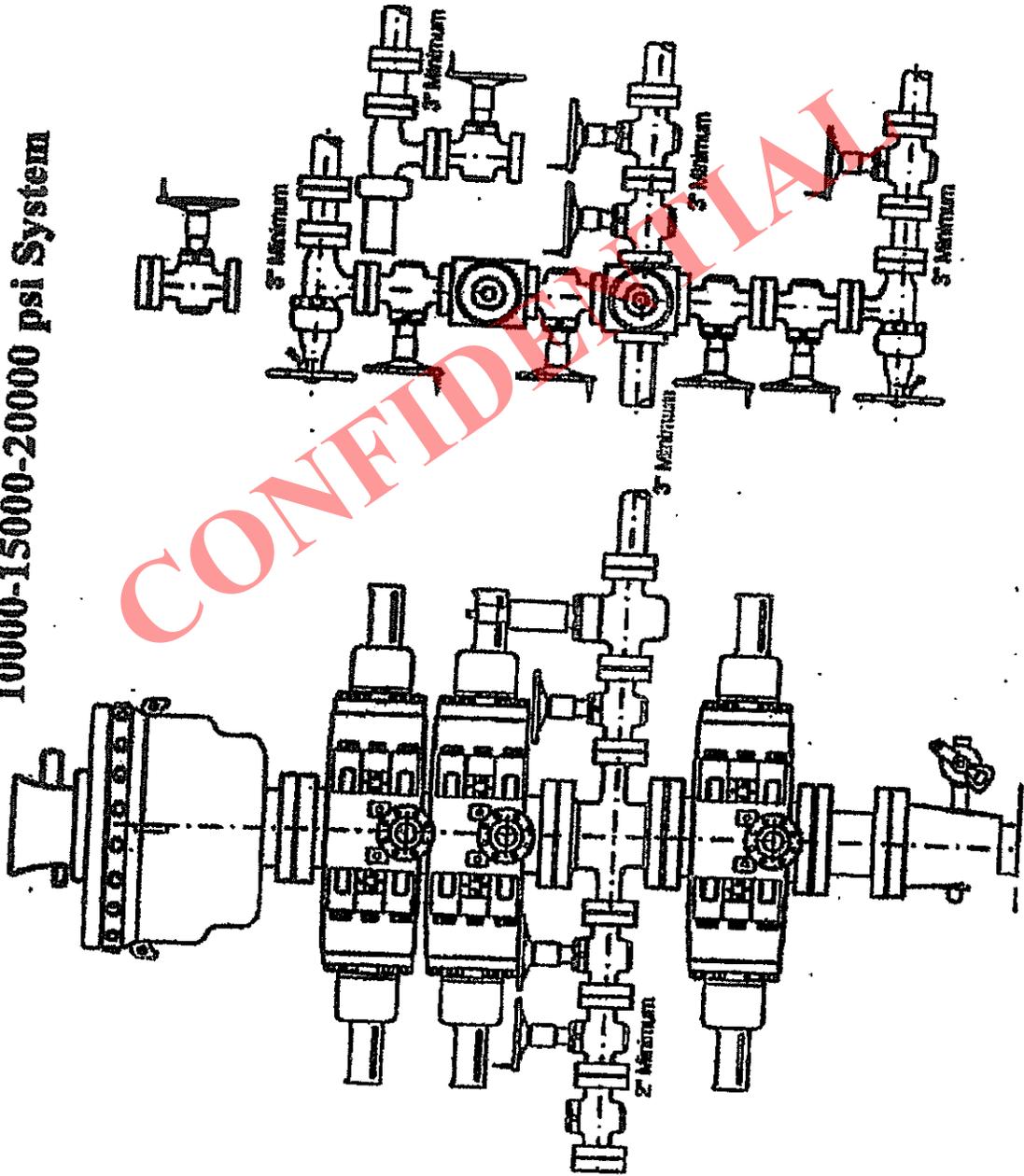
SURVEYING CONSULTANTS

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DUCHESE, UTAH 84021
(435) 738-5352

5M BOP STACK and CHOKE MANIFOLD SYSTEM



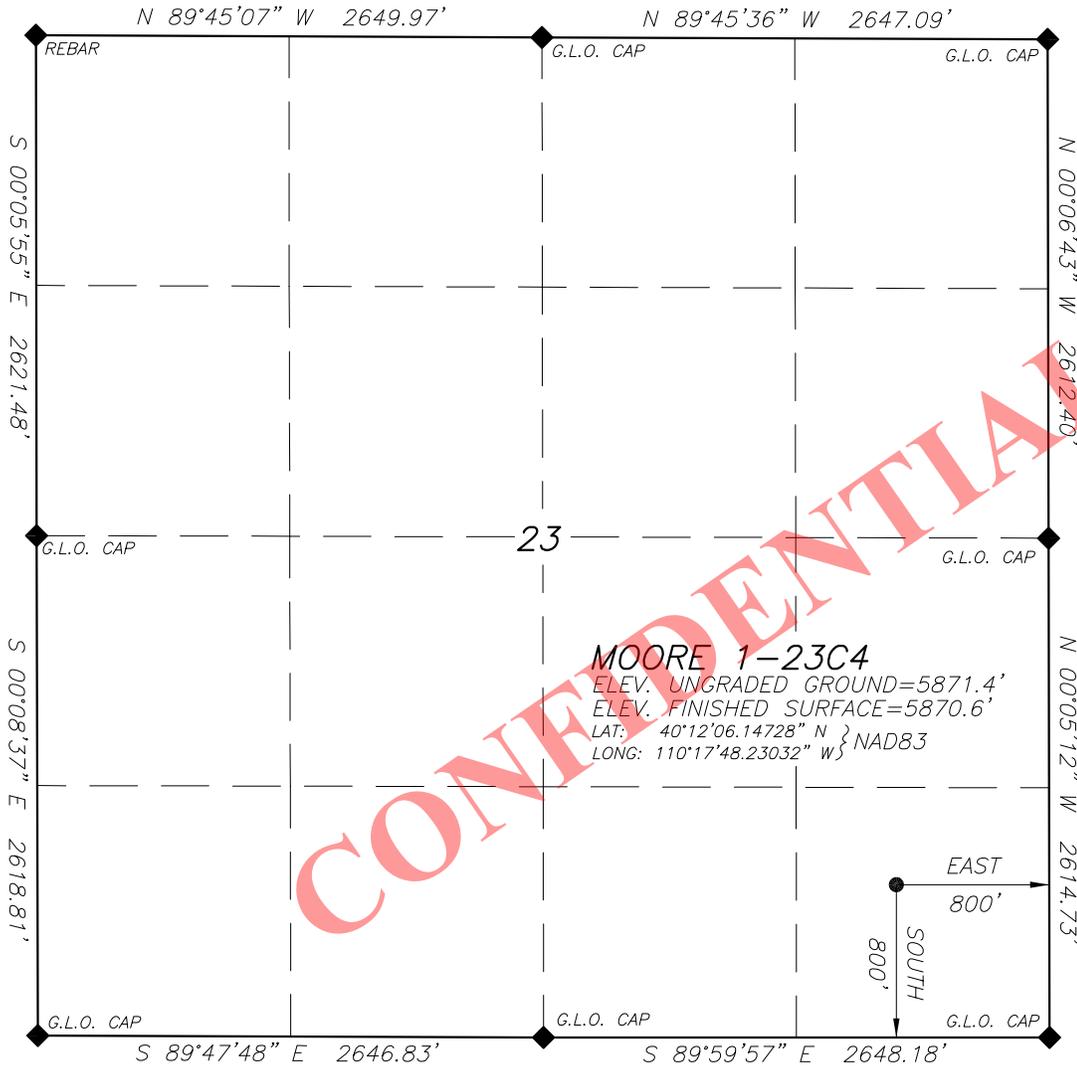
10000-15000-20000 psi System



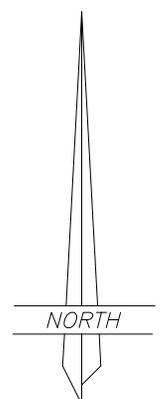
EP ENERGY E & P COMPANY, L.P.

WELL LOCATION
MOORE 1-23C4

LOCATED IN THE SE¼ OF THE SE¼ OF SECTION 23, T3S, R4W, U.S.B.&M. DUCHESNE COUNTY, UTAH



CONFIDENTIAL



SCALE: 1" = 1000'
0 1000

NOTE:
NAD27 VALUES FOR WELL POSITION:
LAT: 40.20174966° N
LONG: 110.29602049° W

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM THE FIELD NOTES AND ELECTRONIC DATA COLLECTOR FILES OF AN ACTUAL SURVEY PERFORMED BY ME, OR UNDER MY PERSONAL SUPERVISION, DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR REESTABLISHED.

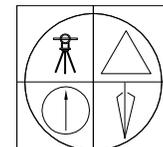


JERRY D. ALLRED, PROFESSIONAL LAND SURVEYOR, CERTIFICATE NO. 148951 (UTAH)

LEGEND AND NOTES

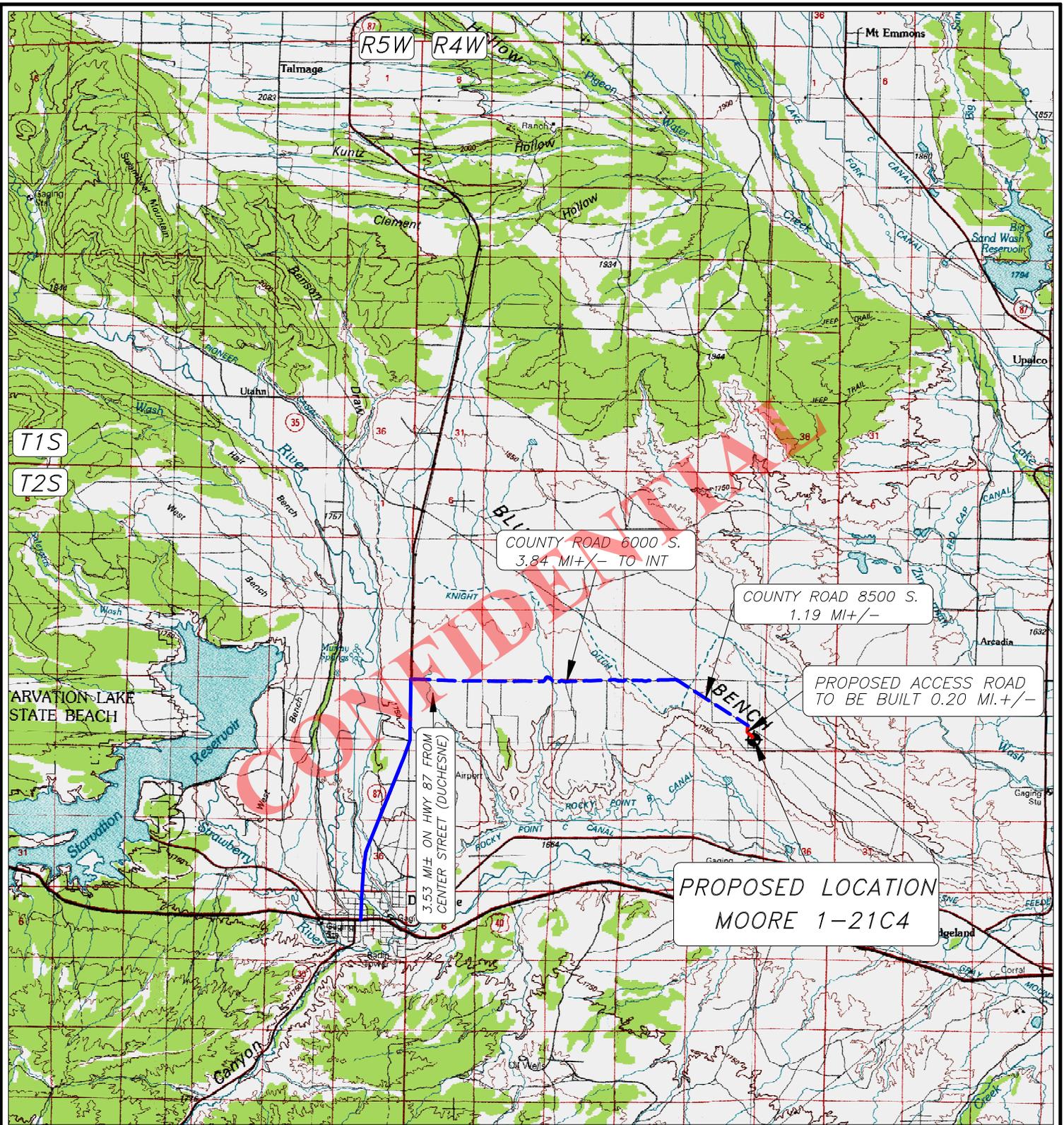
- ◆ CORNER MONUMENTS FOUND AND USED BY THIS SURVEY
THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS USED FOR REFERENCE AND CALCULATIONS AS WAS THE U.S.G.S. MAP
THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT
THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE SECTION CORNER LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

BASIS OF ELEVATIONS: NAVD 88 DATUM USING THE UTAH REFERENCE NETWORK CONTROL SYSTEM



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SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352



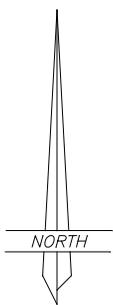
LEGEND:

 PROPOSED WELL LOCATION

01-128-313

JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHEсне, UTAH 84021
(435) 738-5352



EP ENERGY E & P COMPANY, L.P.

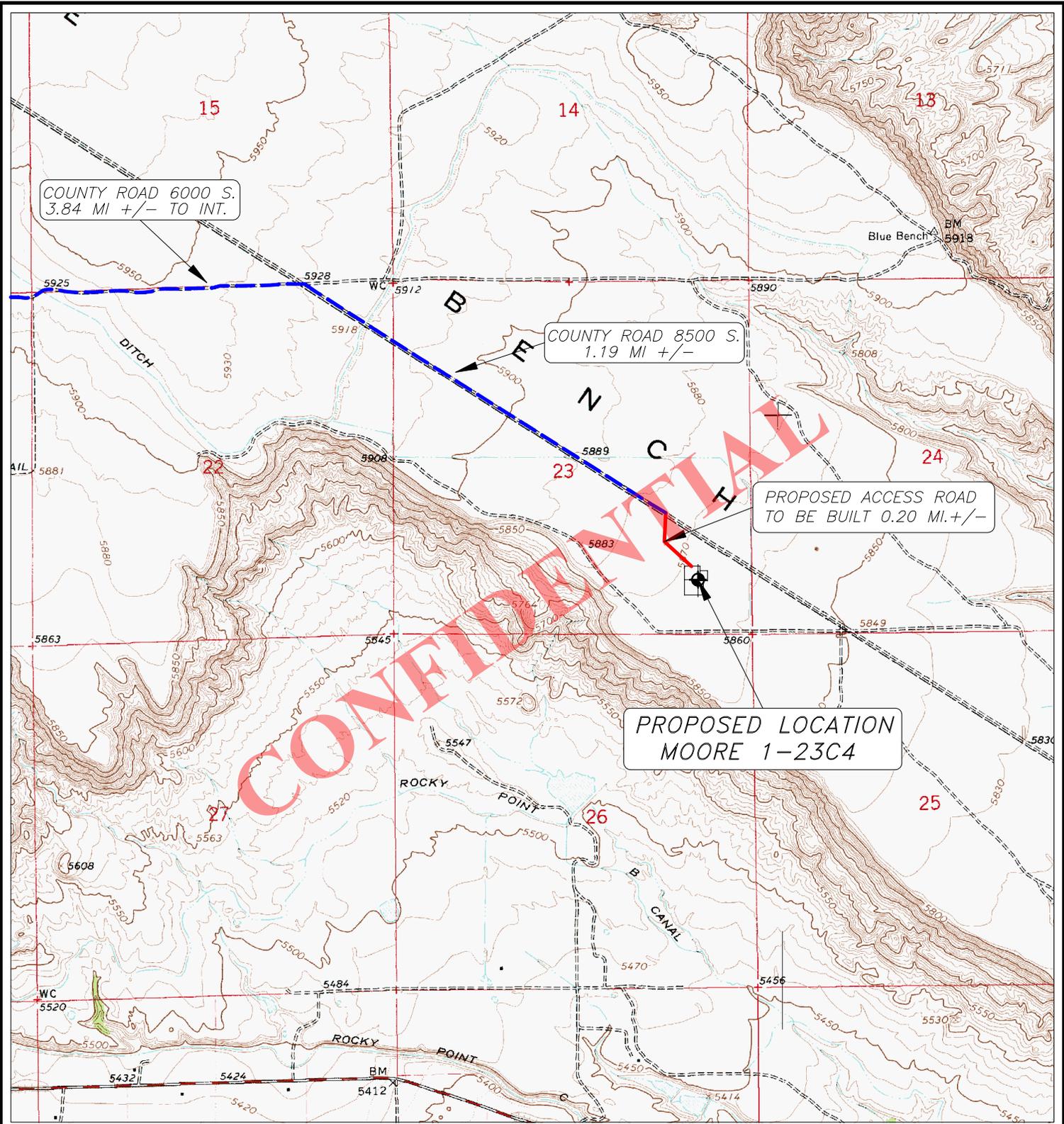
MOORE 1-23C4

SECTION 23, T3S, R4W, U.S.B.&M.

800' FSL 800' FEL

TOPOGRAPHIC MAP "A"

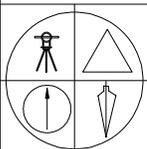
SCALE; 1"=10,000'
21 AUG 2012



LEGEND:

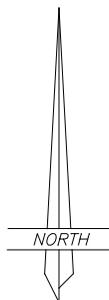
-  PROPOSED WELL LOCATION
-  PROPOSED ACCESS ROAD
-  EXISTING GRAVEL ROAD
-  EXISTING PAVED ROAD

01-128-313



JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESTER, UTAH 84021
(435) 738-5352

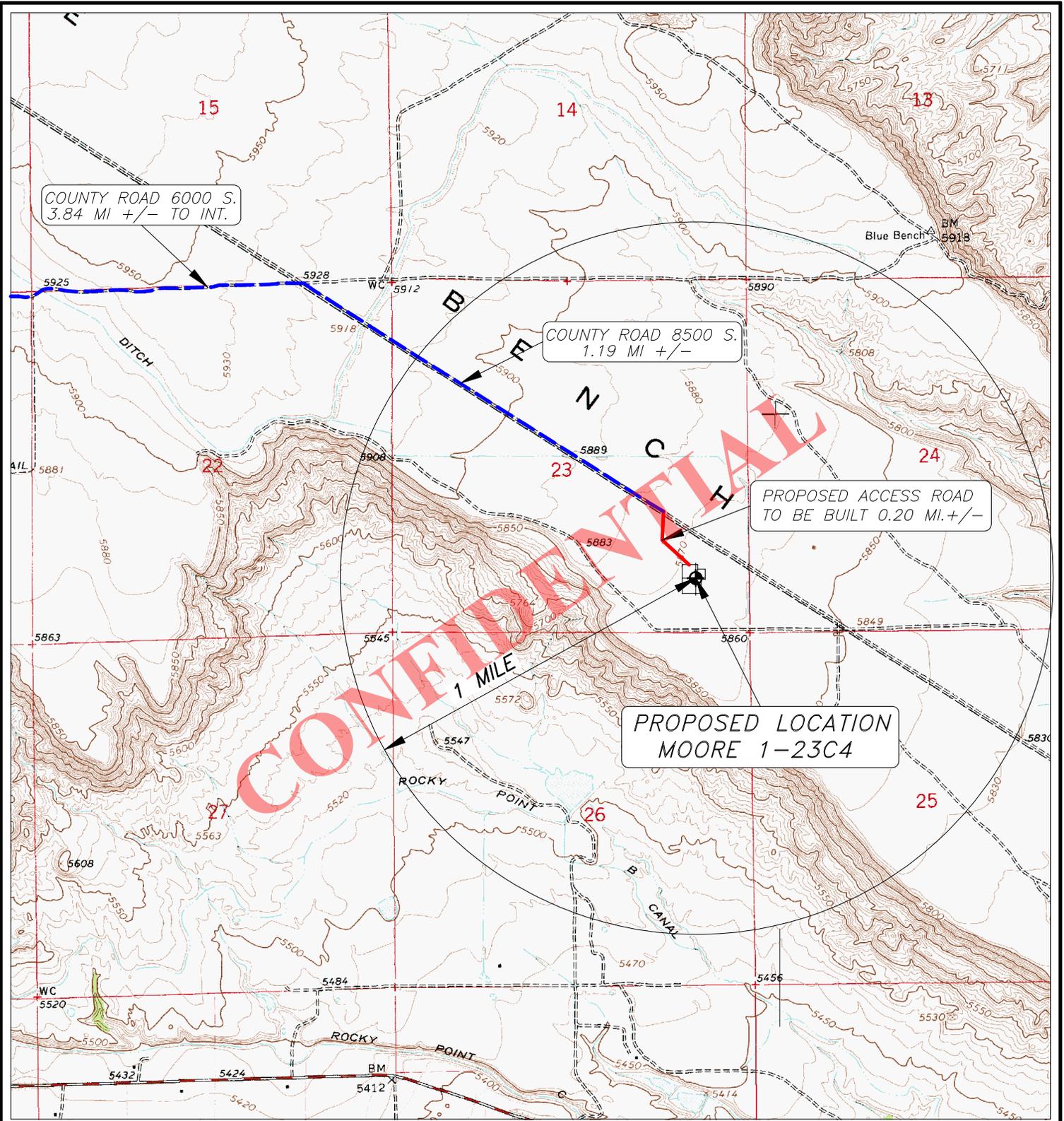


EL PASO E & P COMPANY, L.P.

MOORE 1-23C4
SECTION 21, T3S, R4W, U.S.B.&M.
800' FSL 800' FEL

TOPOGRAPHIC MAP "B"

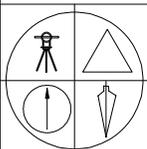
SCALE: 1"=2000'
21 AUG 2012



LEGEND:

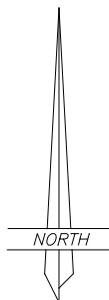
-  PROPOSED WELL LOCATION
-  OTHER WELLS AS LOCATED FROM SUPPLIED MAP

01-128-313



JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESTER, UTAH 84021
(435) 738-5352



EL PASO E & P COMPANY, L.P.

MOORE 1-23C4
SECTION 21, T3S, R4W, U.S.B.&M.
800' FSL 800' FEL

TOPOGRAPHIC MAP "C"

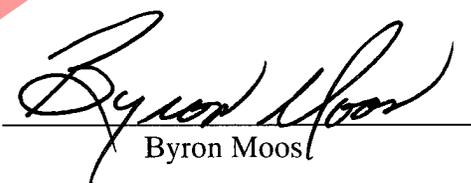
SCALE: 1"=2000'
21 AUG 2012

AFFIDAVIT OF DAMAGE SETTLEMENT AND RELEASE

Byron Moos personally appeared before me, and, being duly sworn, deposes and says:

1. My name is Byron Moos. I am over the age of 21 and am an Independent Oil and Gas Landman under contract with Transcontinent Oil Company acting as agent for EP Energy E&P Company, L.P., whose address is 1001 Louisiana Street, Houston, Texas 77002 ("EP Energy").
2. EP Energy is the operator of the proposed Moore 1-23C4 well ("the Well") to be located in the SE/4SE/4 of Section 23, Township 3 South, Range 4 West, USM, Duchesne County, Utah on a portion of Tract 23-42 and Tract 23-43, being more fully described as; Beginning at the Northeast corner of Section 23, thence South 00°02'52" East 4,180.80 feet to an iron pin, the true point of beginning; thence continuing South 00°02'52" East 348.40 feet to an iron pin; thence Westerly 1,321.44 feet; thence North 00°09' West 348.40 feet; thence Easterly 1,321.84 feet to the true point of beginning. (Tract 23-42) Also beginning at the Northeast corner of Section 23, thence South 00°02'52" East 4,529.20 feet to an iron pin, the true point of beginning; thence continuing South 00°02'52" East 348.40 feet; thence westerly 1,321.04 feet; thence North 00°09' West 348.40 feet; then Easterly 1,321.44 feet to the true point of beginning. (Tract 23-43) (the "Drill site Location"). The surface owner of the Drill site location is Donna J. Moore whose address is P. O. Box 148, Cokeville, WY 83114. Telephone number 307-256-7443. (the "Surface Owner").
3. EP Energy and the Surface Owner have entered into a Damage Settlement and Release Agreement dated September 13, 2012 to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of operations associated with the drilling, completion and producing the Well.

FURTHER AFFIANT SAYETH NOT.

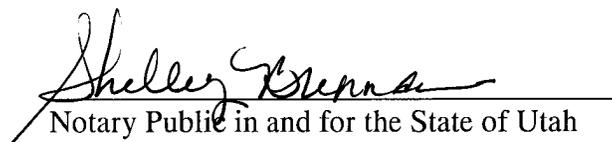

 Byron Moos

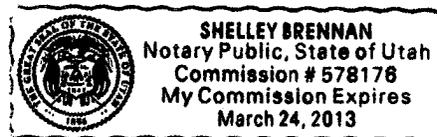
CONFIDENTIAL

ACKNOWLEDGMENT

STATE OF UTAH §
 §
 COUNTY OF DUCHESNE, §.

This instrument was acknowledged before me on this the 14th day of September, 2012 by Byron Moos as a Landman acting as agent for EP ENERGY E&P COMPANY, L.P., a Delaware limited partnership, on behalf of said partnership and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.


 Notary Public in and for the State of Utah



EP Energy E&P Company, L.P.

Related Surface Information

1. Current Surface Use:

- Livestock Grazing and Oil and Gas Production.

2. Proposed Surface Disturbance:

- The road will be crown and ditch. Water wings will be constructed on the access road as needed.
- The topsoil will be windrowed and re-spread in the borrow area.
- New road to be constructed will be approximately .20 miles in length and 66 feet wide.
- All equipment and vehicles will be confined to the access road, pad and area specified in the APD.

3. Location Of Existing Wells:

- Existing oil, gas wells within one (1) mile radius of proposed well are provided in EXHIBIT C.

4. Location And Type Of Drilling Water Supply:

- Drilling water: Duchesne City Water/East Duchesne Water

5. Existing/Proposed Facilities For Productive Well:

- There are no existing facilities that will be utilized for this well.
- A pipeline corridor .20 miles will parallel the proposed access road. The corridor will contain one 4 inch gas line and one 2 inch gas line and one 2 inch Salt Water disposal line. Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area; backsloping and contouring all cut and fill slopes. These areas will be reseeded. Refer to plans for reclamation of surface for details.
- Upgrade and maintain access roads and drainage control structures (e.g., culverts, drainage dips, ditching, etc.) as necessary to prevent soil erosion and accommodate safe, year-round traffic.

6. Construction Materials:

- Native soil from road and location will be used for construction materials along with gravel and/or scoria road base material. In the event that conditions should necessitate graveling of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area.

7. Methods For Handling Waste Disposal:

- The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of ½ the total depth below the original ground surface on the lowest point with the pit. The pit will be lined with a 20-mil polyethylene to prevent leakage of fluids. The liner will be rolled into place and secured at the ends, i.e. buried on top of the pit berms. Prior to use, the reserve pit will be fenced on three sides; the fourth side will be fenced at the time the rig is removed. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be placed in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.
- Garbage and other trash will be contained in the portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig moving off location and hauled to an authorized disposal site.
- Sewage will be handled in Portable Toilets.
- Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production. Any hydrocarbons produced during completion work will be contained in test tanks and removed from the location at a later date.
- Water from the reserve pit may be used for drilling of additional wells. The water will be trucked along access roads as approved in pertinent APD's

8. Ancillary Facilities:

- There will be no ancillary facilities associated with this project.

9. Surface Reclamation Plans:

Backfilling of the pits will be done when dry. In the event of a dry hole, the location will be re-contoured, the topsoil will be distributed evenly over the entire location, and the seedbed prepared.

- Seed will be planted after September 15th, and prior to ground frost, or seed will be planted after the frost has left and before May 15th. Slopes to steep for machinery will be hand broadcast and raked with twice the specified amount of seed.
 1. The construction program and design are on the attached cut, fill and cross sectional diagrams.
 2. Prior to construction, all topsoil will be removed from the entire site and stockpiled. Topsoil for this site is the first 6 inches of soil materials.
 3. After the location has been reshaped and after redistributing the topsoil, the operator will rip and scarify the drilling platform and access road on the contour, to a depth of at least 12 inches.
- Rehabilitation will begin upon the completion of the drilling. Complete rehabilitation will depend on weather conditions and the amount of time required to dry the reserve pit.
 1. All rehabilitation work including seeding will be completed as soon as weather and the reserve pit conditions are appropriate.
 2. Landowner will be contacted for rehabilitation requirements.

10. Surface Ownership:

Donna J. Moore
P.O. Box 148
Cokeville, Wyoming 83114
307.256.7443

Other Information:

- The surface soil consists of clay, and silt.
- Flora – vegetation consists of the following: Sagebrush, Juniper and prairie grasses.
- Fauna – antelope, deer, coyotes, raptors, small mammals, and domestic grazing animals.
- Current surface uses – Livestock grazing and mineral exploration and production.

• **Operator and Contact Persons:**

Construction and Reclamation:

EP Energy E&P Company, L.P.
Wayne Garner
PO Box 410
Altamont, Utah 84001
435-454-3394 – Office
435-823-1490 – Cell

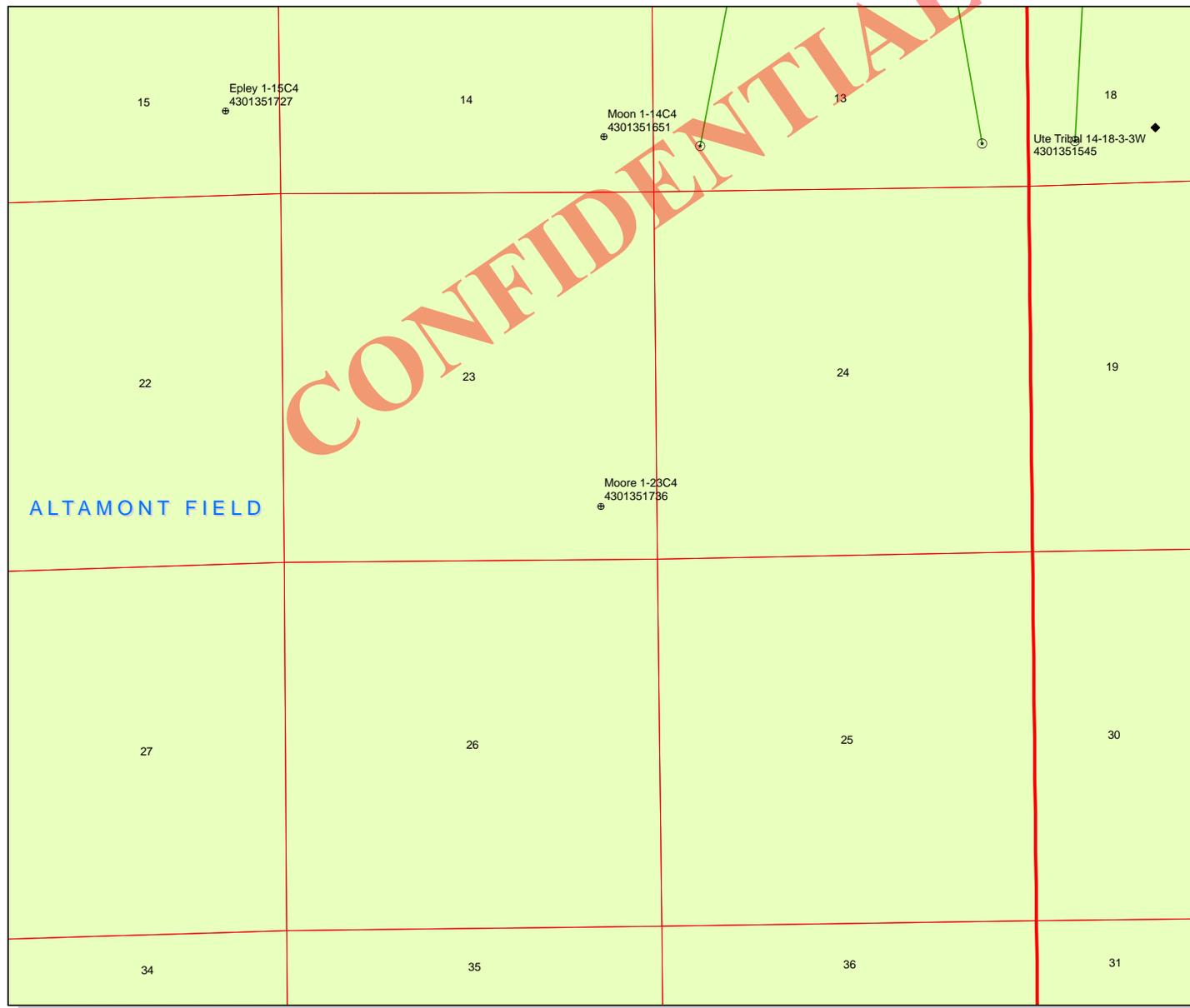
Regarding This APD

EP Energy E&P Company, L.P.
Maria S. Gomez
1001 Louisiana, Rm 2730D
Houston, Texas 77002
713-997-5038 – Office

Drilling

EP Energy E&P Company, L.P.
Joe Cawthorn – Drilling Engineer
1001 Louisiana, Rm 2523B
Houston, Texas 77002
713-997-5929 – office
832-465-2882 – Cell

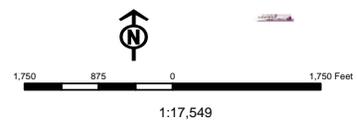
CONFIDENTIAL



API Number: 4301351736
Well Name: Moore 1-23C4
Township T03.0S Range R04.0W Section 23
Meridian: UBM
 Operator: EP ENERGY E&P COMPANY, L.P.

Map Prepared:
 Map Produced by Diana Mason

- | | |
|---------------|-------------------------------------|
| Units | Wells Query |
| STATUS | STATUS |
| ACTIVE | APD - Approved Permit |
| EXPLORATORY | DRIL - Spudded (Drilling Commenced) |
| GAS STORAGE | GIW - Gas Injection |
| NF PP OIL | GS - Gas Storage |
| NF SECONDARY | LOC - New Location |
| P1 OIL | OPS - Operation Suspended |
| PP GAS | PA - Plugged Abandoned |
| PP GEOTHERML | PGW - Producing Gas Well |
| PP OIL | POW - Producing Oil Well |
| SECONDARY | SGW - Shut-in Gas Well |
| TERMINATED | SOW - Shut-in Oil Well |
| Fields | TA - Temp. Abandoned |
| STATUS | TW - Test Well |
| Unknown | WDW - Water Disposal |
| ABANDONED | WW - Water Injection Well |
| ACTIVE | WSW - Water Supply Well |
| COMBINED | Bottom Hole Location - Oil&GasDls |
| INACTIVE | |
| STORAGE | |
| TERMINATED | |



Well Name	EP ENERGY E&P COMPANY, L.P. Moore 1-23C4 43013517360000			
String	Cond	Surf	I1	L1
Casing Size(")	13.375	9.625	7.000	4.500
Setting Depth (TVD)	800	2730	8500	11000
Previous Shoe Setting Depth (TVD)	0	800	2730	8500
Max Mud Weight (ppg)	8.8	9.5	10.5	12.0
BOPE Proposed (psi)	1000	1000	5000	10000
Casing Internal Yield (psi)	2730	5750	11220	12410
Operators Max Anticipated Pressure (psi)	6864			12.0

Calculations	Cond String	13.375	"	
Max BHP (psi)	.052*Setting Depth*MW=	366		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	270	YES	rotating head, air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	190	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	190	NO	OK
Required Casing/BOPE Test Pressure=		800	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient	

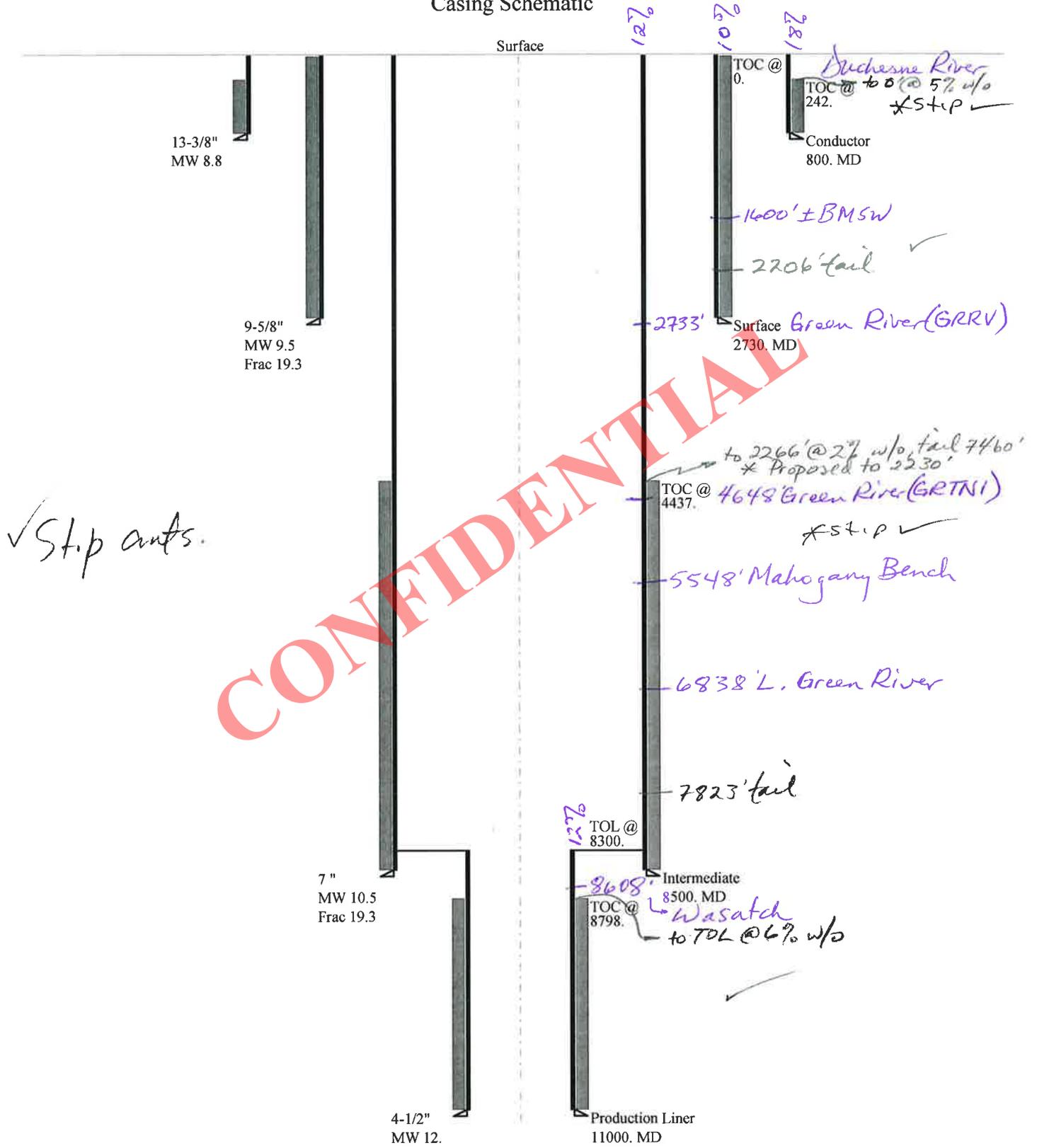
Calculations	Surf String	9.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	1349		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1021	NO	rotating head + 5M annular WBM
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	748	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	924	NO	OK
Required Casing/BOPE Test Pressure=		2730	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		800	psi *Assumes 1psi/ft frac gradient	

Calculations	I1 String	7.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	4641		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3621	YES	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2771	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3372	NO	OK
Required Casing/BOPE Test Pressure=		7854	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		2730	psi *Assumes 1psi/ft frac gradient	

Calculations	L1 String	4.500	"	
Max BHP (psi)	.052*Setting Depth*MW=	6864		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	5544	YES	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	4444	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	6314	YES	
Required Casing/BOPE Test Pressure=		8687	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		8500	psi *Assumes 1psi/ft frac gradient	

43013517360000 Moore 1-23C4

Casing Schematic



Well name:	43013517360000 Moore 1-23C4	
Operator:	EP ENERGY E&P COMPANY, L.P.	
String type:	Conductor	Project ID: 43-013-51736
Location:	DUCHESNE COUNTY	

Design parameters:

Collapse

Mud weight: 8.800 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 85 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft
Cement top: 242 ft

Burst

Max anticipated surface pressure: 270 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 366 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 696 ft

Completion type is subs
Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	800	13.375	54.50	J-55	ST&C	800	800	12.49	9925
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	366	1130	3.090	366	2730	7.47	37.9	514	13.55 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801-538-5357
FAX: 801-359-3940

Date: October 30, 2012
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 800 ft, a mud weight of 8.8 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013517360000 Moore 1-23C4	
Operator:	EP ENERGY E&P COMPANY, L.P.	
String type:	Surface	Project ID: 43-013-51736
Location:	DUCHESNE COUNTY	

Design parameters:

Collapse

Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 112 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: Surface

Burst

Max anticipated surface pressure: 2,402 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,730 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 2,344 ft

Completion type is subs
Non-directional string.

Re subsequent strings:

Next setting depth: 8,500 ft
Next mud weight: 10.500 ppg
Next setting BHP: 4,636 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,730 ft
Injection pressure: 2,730 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2730	9.625	40.00	N-80	LT&C	2730	2730	8.75	34739
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1347	3090	2.294	2730	5750	2.11	93.8	737	7.86 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: October 30, 2012
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2730 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013517360000 Moore 1-23C4	
Operator:	EP ENERGY E&P COMPANY, L.P.	Project ID:
String type:	Intermediate	43-013-51736
Location:	DUCHESNE COUNTY	

Design parameters:

Collapse

Mud weight: 10.500 ppg
 Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
 Surface temperature: 74 °F
 Bottom hole temperature: 193 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 1,000 ft
 Cement top: 4,437 ft

Burst

Max anticipated surface pressure: 4,437 psi
 Internal gradient: 0.220 psi/ft
 Calculated BHP 6,307 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
 8 Round LTC: 1.80 (J)
 Buttress: 1.60 (J)
 Premium: 1.50 (J)
 Body yield: 1.60 (B)

Tension is based on air weight.
 Neutral point: 7,149 ft

Completion type is subs
Non-directional string.

Re subsequent strings:

Next setting depth: 11,000 ft
 Next mud weight: 12.000 ppg
 Next setting BHP: 6,857 psi
 Fracture mud wt: 19.250 ppg
 Fracture depth: 8,500 ft
 Injection pressure: 8,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	8500	7	29.00	P-110	LT&C	8500	8500	6.059	95987
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4636	8530	1.840	6307	11220	1.78	246.5	797	3.23 J

Prepared by: Helen Sadik-Macdonald
 Div of Oil, Gas & Mining

Phone: 801 538-5357
 FAX: 801-359-3940

Date: October 30, 2012
 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 8500 ft, a mud weight of 10.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013517360000 Moore 1-23C4	
Operator:	EP ENERGY E&P COMPANY, L.P.	Project ID:
String type:	Production Liner	43-013-51736
Location:	DUCHESNE COUNTY	

Design parameters:

Collapse

Mud weight: 12.000 ppg
 Internal fluid density: 1.500 ppg

Minimum design factors:

Collapse:

Design factor 1.125

Environment:

H2S considered? No
 Surface temperature: 74 °F
 Bottom hole temperature: 228 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 1,000 ft

Burst:

Design factor 1.00

Cement top: 8,798 ft

Burst

Max anticipated surface pressure: 4,437 psi
 Internal gradient: 0.220 psi/ft
 Calculated BHP 6,857 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
 8 Round LTC: 1.80 (J)
 Buttress: 1.60 (J)
 Premium: 1.50 (J)
 Body yield: 1.60 (B)

Liner top: 8,300 ft

Non-directional string.

Tension is based on air weight.
 Neutral point: 10,522 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2700	4.5	13.50	P-110	LT&C	11000	11000	3.795	15129
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	6000	10680	1.780	6857	12410	1.81	36.5	338	9.27 J

Prepared by: Helen Sadik-Macdonald
 Div of Oil, Gas & Mining

Phone: 801 538-5357
 FAX: 801-359-3940

Date: October 30, 2012
 Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 11000 ft, a mud weight of 12 ppg. An Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Sedimentation Issues N**Site Stability Issues** N**Drainage Diversion Required?** N**Berm Required?** Y

Location and tanks

Erosion Sedimentation Control Required? N**Paleo Survey Run?** N **Paleo Potential Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N**Reserve Pit****Site-Specific Factors****Site Ranking**

Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	>1320	0	
Native Soil Type	High permeability	20	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
Final Score		25	1 Sensitivity Level

Characteristics / Requirements

Proposed reserve pit in cut on the northeastern side of location, measuring 110' wide by 150' long by 12 feet deep, and having prevailing winds from the west.

Closed Loop Mud Required? **Liner Required?** Y **Liner Thickness** 20 **Pit Underlayment Required?****Other Observations / Comments**

Surface is nearly flat, sagebrush cover, little to no impact, no comments or concerns with site, landowner was invited and did not attend.

Dennis Ingram
Evaluator

10/12/2012
Date / Time

Application for Permit to Drill
Statement of Basis
Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
6913	43013517360000	LOCKED	OW	P	No
Operator	EP ENERGY E&P COMPANY, L.P.		Surface Owner-APD	Donna J. Moore	
Well Name	Moore 1-23C4		Unit		
Field	UNDESIGNATED		Type of Work	DRILL	
Location	SESE 23 3S 4W U 800 FSL 800 FEL GPS Coord (UTM) 559857E 4450371N				

Geologic Statement of Basis

El Paso proposes to set 800 feet of conductor and 2,730 feet of surface casing both of which will be cemented to surface. The surface and intermediate holes will be drilled utilizing fresh water mud. The estimated depth to the base of moderately saline ground water is 1,600 feet. A search of Division of Water Rights records indicates that there are 4 water wells within a 10,000 foot radius of the center of Section 23. These wells probably produce water from the Duchesne River Formation. Depths of the wells fall in the range of 150-600 feet. The wells are listed as being used for irrigation, stock watering and domestic. The nearest water well is over a mile north of the proposed well. The proposed drilling, casing and cement program should adequately protect the highly used Duchesne River aquifer.

Brad Hill
APD Evaluator

10/22/2012
Date / Time

Surface Statement of Basis

A presite visit was scheduled and done on October 12, 2012 to address issues and take input regarding the construction and drilling of this well. The location surface is owned by Donna Moore who lives in Wyoming and she was invited to the presite prior to the presite visit. A landowner agreement is in place.

This location is nearly flat, having 3.1 feet of cut on the northwestern corner and 1.0 feet of fill on the southeastern corner. There aren't any surface waters or drainage issues involved with this site, as it is open rangeland on the lower portion of Blue Bench. The operator shall follow their operations plan and install a 20 mil synthetic liner in the reserve pit to prevent seepage. Also the reserve pit should be fenced to prevent livestock or wildlife from entering same. The location shall also be bermed to prevent spills from leaving the well site.

Dennis Ingram
Onsite Evaluator

10/12/2012
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 20 mils shall be properly installed and maintained in the reserve pit.
Pits	The reserve pit should be located on the east side of the location.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 9/21/2012

API NO. ASSIGNED: 43013517360000

WELL NAME: Moore 1-23C4

OPERATOR: EP ENERGY E&P COMPANY, L.P. (N3850)

PHONE NUMBER: 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: SESE 23 030S 040W

Permit Tech Review:

SURFACE: 0800 FSL 0800 FEL

Engineering Review:

BOTTOM: 0800 FSL 0800 FEL

Geology Review:

COUNTY: DUCHESNE

LATITUDE: 40.20161

LONGITUDE: -110.29670

UTM SURF EASTINGS: 559857.00

NORTHINGS: 4450371.00

FIELD NAME: UNDESIGNATED

LEASE TYPE: 4 - Fee

LEASE NUMBER: Fee

PROPOSED PRODUCING FORMATION(S): GREEN RIVER-WASATCH

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: STATE/FEE - 400JU0708
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: Duchesne City/East Duchesne Water District
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingling Approved

LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 139-90
- Effective Date: 5/9/2012
- Siting: 4 Producing Grrv-Wstc Wells In Sec Drl Unit
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhll
8 - Cement to Surface -- 2 strings - hmadonald
13 - Cement Volume Formation (3a) - hmadonald



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Moore 1-23C4
API Well Number: 43013517360000
Lease Number: Fee
Surface Owner: FEE (PRIVATE)
Approval Date: 12/10/2012

Issued to:

EP ENERGY E&P COMPANY, L.P., 1001 Louisiana, Houston, TX 77002

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-90. The expected producing formation or pool is the GREEN RIVER-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volumes for the 13 3/8" and 9 5/8" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

Cement volume for the 7" intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 2230' MD in order to adequately isolate the Green River formation.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

Approved by:

A handwritten signature in black ink, appearing to read "J. Rogers", written in a cursive style.

For John Rogers
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: Fee	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME:	
8. WELL NAME and NUMBER: Moore 1-23C4	
9. API NUMBER: 43013517360000	
9. FIELD and POOL or WILDCAT: UNDESIGNATED	
COUNTY: DUCHESNE	
STATE: UTAH	

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: Moore 1-23C4
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.	9. API NUMBER: 43013517360000
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston, TX, 77002	PHONE NUMBER: 713 997-5038 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0800 FSL 0800 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 23 Township: 03.0S Range: 04.0W Meridian: U	

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

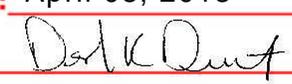
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/8/2013	<input type="checkbox"/> ACIDIZE	<input checked="" type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Go from 4 1/2", 13.5#, P-110 liner to 5", 18#, HCP-110 STL liner. This is one of two scenarios. The other scenario is being submitted as separate sundry notice.

Approved by the Utah Division of Oil, Gas and Mining

Date: April 08, 2013

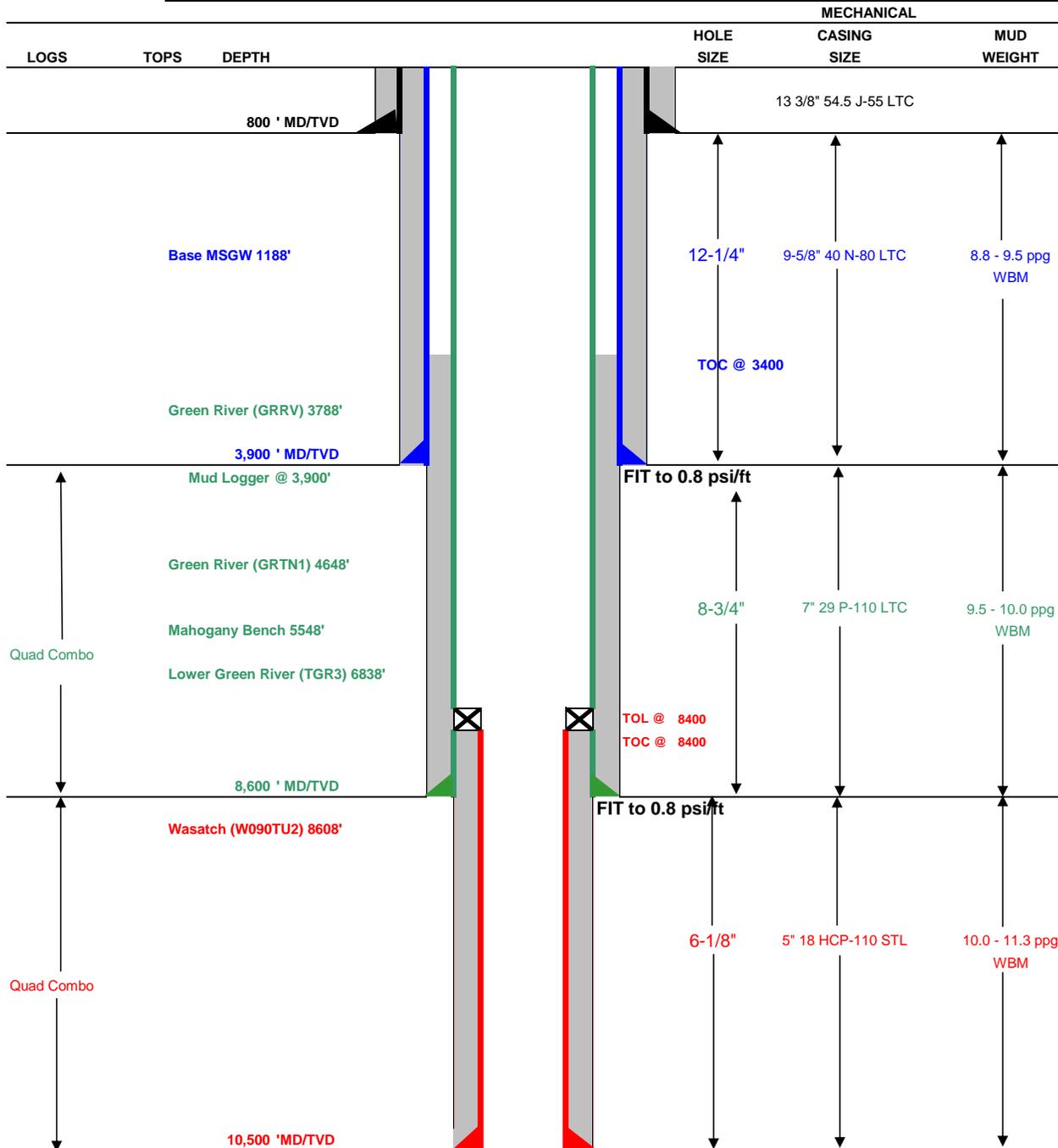
By: 

NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A	DATE 4/5/2013	



Drilling Schematic

Company Name: EP ENERGY	Date: March 27, 2013
Well Name: Moore 1-23C4	TD: 10,500
Field, County, State: Altamont - Bluebell, Duchesne, Utah	AFE #: 158736
Surface Location: Sec 23 T3S R4W 800' FSL 800' FEL	BHL: Straight Hole
Objective Zone(s): Green River, Wasatch	Elevation: 5870'
Rig: Precision 404	Spud (est.):
BOPE Info: 5.0 x 13 3/8 rotating head from 800' to 3,900' 11 5M BOP stack and 5M kill lines and choke manifold used from 3,900' to 8,600' 11 10M BOE w/rotating head, 5M annular, 3.5 rams, blind rams & mud cross from 8,600' to TD	



DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	800	54.5	J-55	LTC	2,730	1,140	1,399
SURFACE	9-5/8"	0	3900	40.00	N-80	LTC	3,090	5,750	820
INTERMEDIATE	7"	0	8600	29.00	P-110	LTC	11,220	8,530	797
PRODUCTION LINER	5"	8400	10500	18.00	HCP-110	STL	13,940	15,360	580

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		800	Class G + 3% CACL2	1000	100%	15.8 ppg	1.15
SURFACE	Lead	3,400	Boral Craig POZ 35%, Mountain G 65%, Bentonite Wyoming 8%, Silicate 5 lbm/sk, Pol-E Flake 0.125 lbm/sk, Kwik Seal 0.25 lb/sk	543	75%	11.0 ppg	3.16
	Tail	500	Halco-light premium+3 lb/sk Silicate+0.3% Econolite+1% Salt+0.25 lbm/sk Kol-Seal+0.24 lb/sk Kwik Seal+ HR-5	191	50%	14.2 ppg	1.33
INTERMEDIATE	Lead	4,200	Halco-Light-Premium+4% Bentonite+0.4% Econolite+0.2% Halad322+3 lb/sk Silicalite Compacted+0.8% HR-5+ 0.125 lb/sk Poly-E-Flake	299	10%	12.0 ppg	2.31
	Tail	1,000	Halco-Light-Premium+0.2% Econolite+0.3% Versaset+0.2% Halad322+0.8% HR-5+ 0.3% SuperCBL+ 0.125 lb/sk Poly-E-Flake	91	10%	12.5 ppg	1.91
PRODUCTION LINER		2,100	Halco- 50/50 Poz Premium Cement+20% SSA-1+0.3% Super CBL+ 0.3% Halad-344+0.3% Halad-413+ 0.2% SCR-100+ 0.125 lb/sk Poly-E-Flake + 3 lb/sk Silicat	156	25%	12.30	1.61

FLOAT EQUIPMENT & CENTRALIZERS	
CONDUCTOR	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
SURFACE	PDC drillable guide shoe, 1 joint casing, PDC drillable float collar & Stage collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float equipment. Maker joint at 8,000'.
LINER	Float shoe, 1 joint, float collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S): Chapman Amend 713-997-3944MANAGER: Tommy Gaydos

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL Oil Well		7. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		8. WELL NAME and NUMBER: Moore 1-23C4
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston, TX, 77002		9. API NUMBER: 43013517360000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0800 FSL 0800 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 23 Township: 03.0S Range: 04.0W Meridian: U		9. FIELD and POOL or WILDCAT: UNDESIGNATED
		COUNTY: DUCHESNE
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 4/8/2013	<input type="checkbox"/> ACIDIZE	<input checked="" type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
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	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Change casing program by omitting liner and having only 3 strings of casing. See attached wellbore for details.

**Approved by the
Utah Division of
Oil, Gas and Mining**

Date: April 09, 2013

By: 

NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A	DATE 4/5/2013	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43013517360000

Cement volume for the 9 5/8" Intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to surface as indicated in the submitted drilling plan.

Cement volume for the 5 1/2" production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 4000' MD minimum (inside previous casing shoe) as indicated in the submitted drilling plan.

BOPE REVIEW			
Well Name			
EI Paso Moore 1-23-C4 API 43-013-51736-0000rev			
EI Paso Moore 1-23-C4 API 43-013-51736-0000rev		String 1	String 2
Casing Size (")		9 5/8	7
Setting Depth (TVD)		800	4000
Previous Shoe Setting Depth (TVD)		40	800
Max Mud Weight (ppg)		9	9
BOPE Proposed (psi)		1000	5000
Casing Internal Yield (psi)		2730	5750
Operators Max Anticipated Pressure (psi)		6170	11.3 ppg

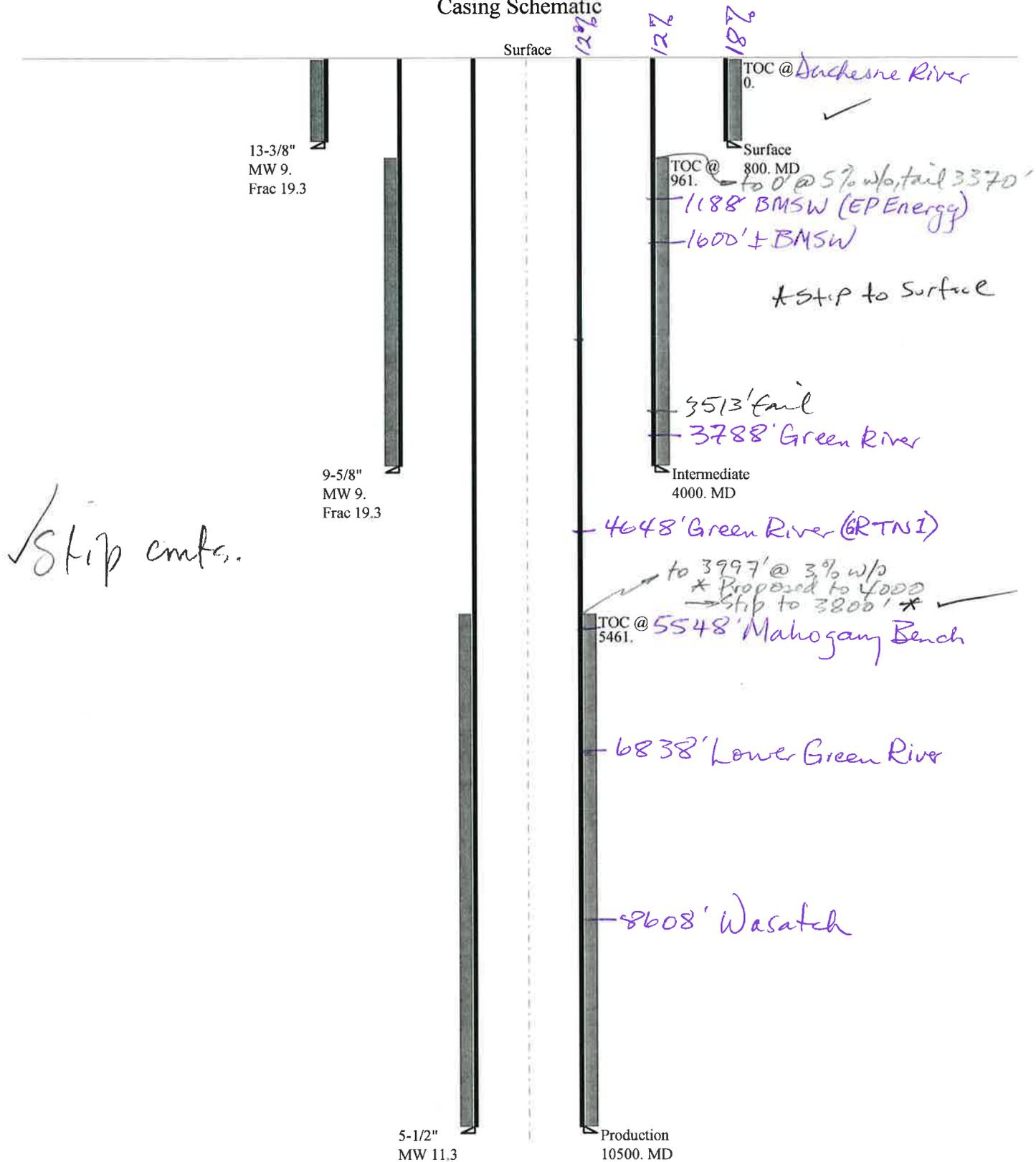
Calculations		String 1	String 2
Max BHP [psi]	.052*Setting Depth*MW =	374	9 5/8 "
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	278	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	198	YES 5" x 20" rotating head to 600'
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	207	NO
Required Casing/BOPE Test Pressure		800 psi	OK
*Max Pressure Allowed @ Previous Casing Shoe =		40 psi	*Assumes 1psi/ft frac gradient

Calculations		String 2	String 3
Max BHP [psi]	.052*Setting Depth*MW =	1872	7 "
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	1392	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	992	YES 5M BOP stack, 5M kill lines, choke manifold
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	1168	NO
Required Casing/BOPE Test Pressure		4000 psi	OK
*Max Pressure Allowed @ Previous Casing Shoe =		800 psi	*Assumes 1psi/ft frac gradient

Calculations		String 3	String 4
Max BHP [psi]	.052*Setting Depth*MW =	6170	5 1/2 "
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	4910	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	3860	YES 10M BOP w/rotating head, 5M annular, 3.5" rams, blind rams, mud cross.
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	4740	NO
Required Casing/BOPE Test Pressure		7448 psi	OK
*Max Pressure Allowed @ Previous Casing Shoe =		4000 psi	*Assumes 1psi/ft frac gradient

43013517360000 Moore 1-23C4rev

Casing Schematic



Well name:	43013517360000 Moore 1-23C4rev		
Operator:	EP ENERGY E&P COMPANY, L.P.		
String type:	Surface	Project ID:	43-013-51736
Location:	DUCHESNE COUNTY		

Design parameters:**Collapse**

Mud weight: 9.000 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 85 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 800 ft

Burst:

Design factor 1.00

Cement top: Surface

Burst

Max anticipated surface pressure: 704 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 800 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on buoyed weight.
Neutral point: 694 ft

Completion type is subs
Non-directional string.

Re subsequent strings:

Next setting depth: 4,000 ft
Next mud weight: 9.000 ppg
Next setting BHP: 1,870 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 800 ft
Injection pressure: 800 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	800	13.375	54.50	J-55	ST&C	800	800	12.49	9926
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	374	1130	3.021	800	2730	3.41	37.8	514	13.60 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: April 9, 2013
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 800 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013517360000 Moore 1-23C4rev		
Operator:	EP ENERGY E&P COMPANY, L.P.		
String type:	Intermediate	Project ID:	43-013-51736
Location:	DUCHESNE COUNTY		

Design parameters:**Collapse**

Mud weight: 9.000 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 3,120 psi
Internal gradient: 0.220 psi/ft
Calculated BHP: 4,000 psi

No backup mud specified.

Minimum design factors:**Collapse:**

Design factor: 1.125

Burst:

Design factor: 1.00

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on buoyed weight.
Neutral point: 3,464 ft

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 130 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 961 ft

Completion type is subs
Non-directional string.

Re subsequent strings:

Next setting depth: 10,500 ft
Next mud weight: 11.300 ppg
Next setting BHP: 6,164 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 4,000 ft
Injection pressure: 4,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	4000	9.625	40.00	N-80	LT&C	4000	4000	8.75	50898
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1870	3090	1.652	4000	5750	1.44	138.6	737	5.32 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: April 9, 2013
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 4000 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013517360000 Moore 1-23C4rev		
Operator:	EP ENERGY E&P COMPANY, L.P.		
String type:	Production	Project ID:	43-013-51736
Location:	DUCHESNE COUNTY		

Design parameters:**Collapse**

Mud weight: 11.300 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 221 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 5,461 ft

Burst

Max anticipated surface pressure: 3,854 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 6,164 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on buoyed weight.

Neutral point: 8,701 ft

Completion type is subs
Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	10500	5.5	17.00	P-110	LT&C	10500	10500	4.767	69161
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	6164	7480	1.214	6164	10640	1.73	147.9	445	3.01 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: April 9, 2013
Salt Lake City, Utah

Remarks:

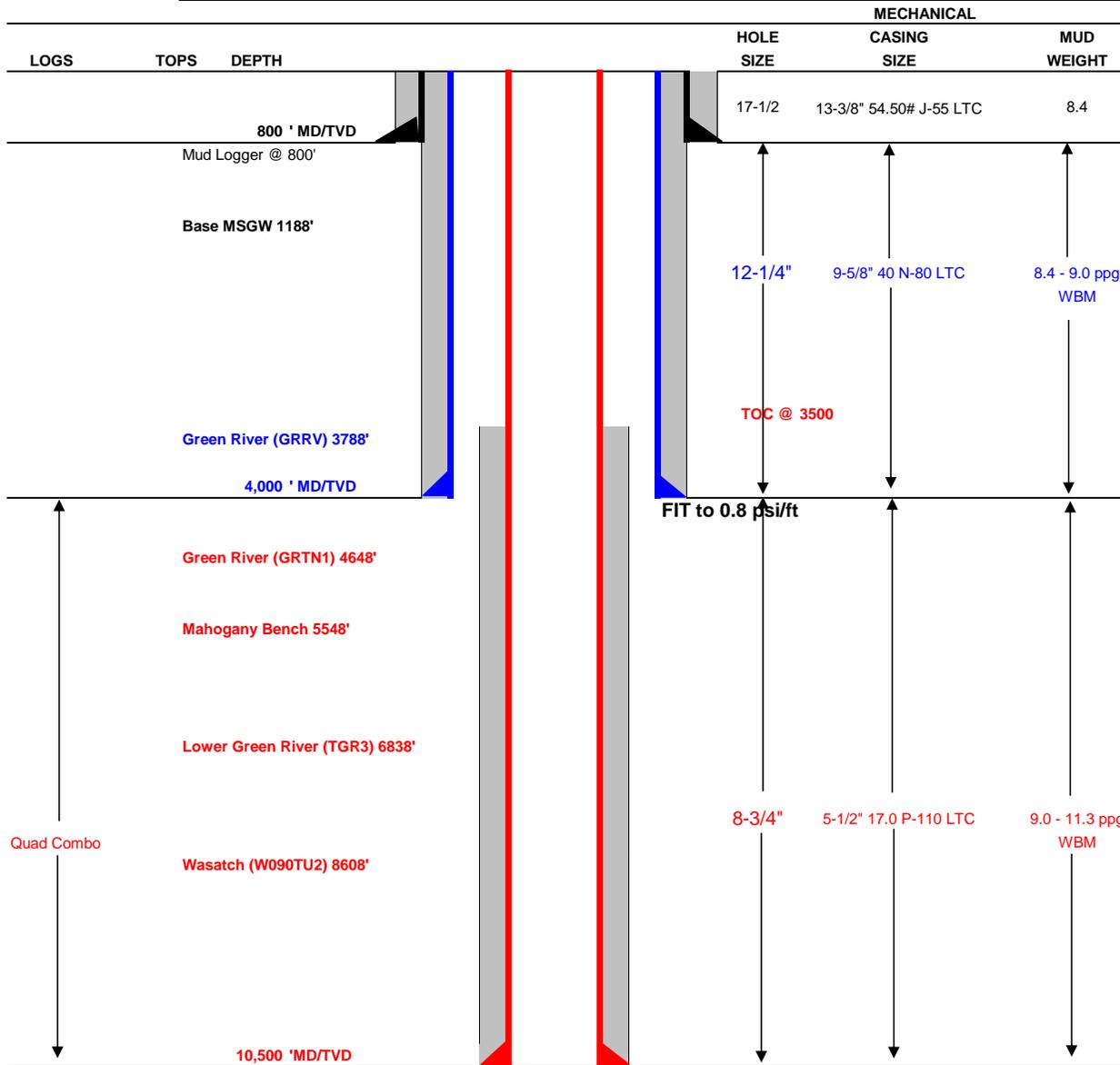
Collapse is based on a vertical depth of 10500 ft, a mud weight of 11.3 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.



Drilling Schematic

Company Name: EP Energy	Date: March 27, 2013
Well Name: Moore 1-23C4	TD: 10,500
Field, County, State: Altamont - Bluebell, Duchesne, Utah	AFE #: 158736
Surface Location: Sec 23 T3S R4W 800' FSL 800' FEL	BHL: Straight Hole
Objective Zone(s): Green River, Wasatch	Elevation: 5870
Rig: Precision 404	Spud: TBD
BOPE Info: 11 5M BOP stack and 5M kill lines and choke manifold used from 800 to 3700 & 11 5M BOE w/rotating head, 5M annular, 3.5 rams, blind rams & mud cross from 3700 to TD	



DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
SURFACE	13-3/8"	0	800	54.5	J-55	LTC	2,730	1,140	1,399
INTERMEDIATE	9-5/8"	0	4000	40.00	N-80	LTC	3,090	5,750	820
PRODUCTION	5-1/2"	0	10500	17.00	P-110	LTC	10,640	7,480	546

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE		800	Class G + 3% CACL2	1000	100%	15.8 ppg	1.15
INTERMEDIATE	Lead	3,500	Boral Craig POZ 35%, Mountain G 65%, Bentonite Wyoming 8%, Silicate 5 lbm/sk, Pol-E Flake 0.125 lbm/sk, Kwik Seal 0.25 lb/sk	421	75%	11.0 ppg	3.16
	Tail	500	Halco-light premium+3 lb/sk Silicate+0.3% Econolite+1% Salt+0.25 lbm/sk Kol-Seal+0.24 lb/sk Kwik Seal+ HR-5	191	50%	14.2 ppg	1.33
PRODUCTION		6,500	Halco- 50/50 Poz Premium Cement+20% SSA-1+0.3% Super CBL+ 0.3% Halad-344+0.3% Halad-413+ 0.2% SCR-100+ 0.125 lb/sk Poly-E-Flake + 3 lb/sk Silicat	861	20%	12.30	2.10

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
INTERMEDIATE	N/A
PRODUCTION	Float shoe, 2 joint, float collar. Thread lock all FE. Maker joints @ 9000', 7500' and 6000'.

PROJECT ENGINEER(S): Chapman Amend 713-997-3944

MANAGER: Tommy Gaydos

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: EP Energy E&P Company, L.P. Operator Account Number: N 3850
 Address: 1001 Louisiana Street, Rm 2628C
city Houston
state TX zip 77002 Phone Number: (713) 997-3587

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351736	Moore 1-23C4		SESE	23	3S	4W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	new	18985	3/13/2013			3/29/2013	
Comments: GR-WS.							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Lisa Morales
 Name (Please Print) _____

 Signature _____
 Regulatory Analyst
 Title _____ Date 3/14/2013

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MAR 15 2013

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well		8. WELL NAME and NUMBER: Moore 1-23C4
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		9. API NUMBER: 43013517360000
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston, TX, 77002	PHONE NUMBER: 713 997-5038 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0800 FSL 0800 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 23 Township: 03.0S Range: 04.0W Meridian: U		COUNTY: DUCHESNE
		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/5/2013	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Well currently in drilling phase.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY April 18, 2013		
NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A		DATE 4/5/2013

1 General**1.1 Customer Information**

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	MOORE 1-23C4		
Project	ALTAMONT FIELD	Site	MOORE 1-23C4
Rig Name/No.	PRECISION DRILLING/404	Event	DRILLING LAND
Start Date	3/31/2013	End Date	
Spud Date/Time	4/2/2013	UWI	MOORE 1-23C4
Active Datum	KB @5,887.6ft (above Mean Sea Level)		
Afe No./Description	158736/47991 / MOORE 1-23C4		

2 Summary**2.1 Operation Summary**

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD From (ft)	Operation
3/17/2013	6:00 6:00	24.00	CASCOND	24		P	670.0	INSTALLED 40' OF 20" COND & 85' OF 14" MOUSE HOLE - DRILL 17 1/2" HOLE TO 670' - RUN AND CMT 13 3/8" 54.50 J-55 STC SHOE AT 635' GL
3/31/2013	6:00 6:00	24.00	MIRU	01		P	635.0	MOVE AND RIG UP. 100% MOVED, 40% RIGGED UP.
4/1/2013	6:00 19:00	13.00	MIRU	01		P	635.0	RAISE DERRICK, RIG UP TOP DRIVE
	19:00 1:00	6.00	DRLSURF	42		P	635.0	NIPPLE UP ROTATING HEAD AND FLOW LINE, HOOK UP GAS BUSTER AND FLARE LINES. MIX MUD.
	1:00 5:30	4.50	DRLSURF	19		P	635.0	PJSM WITH B&C QUICKTEST. P. TEST 13-5/8" DIVERTER STACK. SET TEST PLUG IN WELLHEAD. TEST CHOKE MANIFOLD TO 250 LOW/ 3000 HIGH 10 MINUTES EACH TEST.P. TEST ANNULAR, HCR, MANUAL CHOKE AND KILL LINE VALVES TO 250 LOW / 2500 HIGH 10 MINUTES EACH.
	5:30 6:00	0.50	DRLSURF	14		P	635.0	PICK UP BHA
4/2/2013	6:00 12:00	6.00	DRLSURF	13		P	652.0	PICK UP BHA AND TIH
	12:00 13:30	1.50	DRLSURF	42		P	652.0	DRILLING FC, CEMENT, AND FLOAT SHOE TO 652'
	13:30 15:00	1.50	DRLSURF	42		P	652.0	PJSM WITH VAUGHN AND RIG CREWS. RIG UP VAUGHN AND RUN GYRO
	15:00 16:30	1.50	DRLSURF	41		P	652.0	RU AND DRILL CEMENT OUT OF MOUSE HOLE
	16:30 0:30	8.00	DRLSURF	07		P	652.0	DRILLING FROM 652' TO 1108'
	0:30 1:00	0.50	DRLSURF	12		P	1,108.0	RIG SERVICE
	1:00 6:00	5.00	DRLSURF	07		P	1,108.0	DRILLING FROM 1108' TO 1600'
4/3/2013	6:00 13:30	7.50	DRLSURF	07		P	1,600.0	DRILLING FROM 1,600' TO 2,137'
	13:30 14:00	0.50	DRLSURF	12		P	2,137.0	RIG SERVICE
	14:00 14:30	0.50	DRLSURF	07		P	2,137.0	DRILLING FROM 2,137' TO 2,179'
	14:30 15:30	1.00	DRLSURF	45		N	2,179.0	PRESSURE LOSS. GO THROUGH PUMP #1
	15:30 6:00	14.50	DRLSURF	07		P	2,179.0	DRILLING FROM 2,179' TO 2,976'.
4/4/2013	6:00 14:30	8.50	DRLSURF	07		P	2,976.0	DRILL 2,976' - 3,440'.
	14:30 15:00	0.50	DRLSURF	12		P	3,440.0	SERVICE RIG & TDU
	15:00 4:00	13.00	DRLSURF	07		P	3,440.0	DRILL 3,440' - 3,895'.
	4:00 5:30	1.50	DRLSURF	15		P	3,895.0	CBU.
	5:30 6:00	0.50	DRLSURF	13		P	3,895.0	WIPER TRIP TO SHOE @ 652'.
4/5/2013	6:00 10:00	4.00	DRLSURF	13		P	3,895.0	WIPER TRIP.
	10:00 12:30	2.50	DRLSURF	15		P	3,895.0	CCM.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD From (ft)	Operation
	12:30 16:30	4.00	DRLSURF	13		P	3,895.0	POOH TO RUN 9 5/8' CSNG.
	16:30 20:00	3.50	DRLSURF	14		P	3,895.0	L/DOWN DIR. TOOLS. CLEAN FLOOR
	20:00 6:00	10.00	CASSURF	24		P	3,895.0	PJSM. R/UP FRANKS CSNG AND RUN CSNG. 9 5/8" 40# LTC



TOSS ROY W 5-23 SRSSE

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Mail

Navigation bar with empty boxes and a 'More' button.

COMPOSE

24 Hr Notice for Running and cementing of 5" Prod Liner.

Inbox x

Inbox (63)

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- Important
- Sent Mail
- Drafts (1)**
- Cabinet
- Follow up
- Misc
- Notes
- Priority
- More

RLANDRIG008 via 800onemail.com

4:31 AM (2 hours ago)

April 17, 2013

CONFIDENTIAL

Ms. Daniels;

This is a 24 hour notification of running & cementing 5" 18# P-110 VAM ST-L Production Liner to a depth of 11,000'.

Well: Moore 1-23C4
AP# 43013517360000
County: Duchesne

Drilling Contractor Precision Rig 404.

Best Regards,

Steven Murphy
EP Energy
Rig Site Supervisor
C: 435-823-1725



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APR 17 2013

DIV. OF OIL, GAS & MINING

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caroldaniels@utah.gov

Mail

COMPOSE

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24 Hour notice on running and cementing 7" Intermediate Casing on The Moore 1-23C4.

Inbox x

People (8)

RLANDRIG008

rlandrig008@epenergy.com

RLANDRIG008 via 800onemail.com

Apr 11 (5 days ago)

April 11, 2013

Ms. Daniels;

This is a 24 hour notification of running & cementing 7" 29# HCP-110 LTC Intermediate Casing to a depth of 8,600'.

Well: Moore 1-23C4
API# 43013517360000
County: Duchesne

Drilling Contractor Precision Rig 404.

Best Regards,

Steven Murphy
EP Energy
Rig Site Supervisor
C: 435-823-1725

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APR 11 2013

DIV. OF OIL, GAS & MINING

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
1. TYPE OF WELL Oil Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.	7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston, TX, 77002	8. WELL NAME and NUMBER: Moore 1-23C4
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0800 FSL 0800 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 23 Township: 03.0S Range: 04.0W Meridian: U	9. API NUMBER: 43013517360000
PHONE NUMBER: 713 997-5038 Ext	9. FIELD and POOL or WILDCAT: UNDESIGNATED
	COUNTY: DUCHESNE
	STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 5/3/2013	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Initial Completion"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please see attached procedure and wellbore schematic.

**Approved by the
Utah Division of
Oil, Gas and Mining**

Date: May 02, 2013

By: 

NAME (PLEASE PRINT) Lisa Morales	PHONE NUMBER 713 997-3587	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 5/2/2013	

Moore 1-23 C4 - API 43013517360000
Initial Completion

The following precautions will be taken until the RCA for the Conover is completed:

1. Review torque turning and running of the 7" and 5" liner of anomalies.
2. Test and chart casing for 30 minutes, noting pressure if any on surface casing.
3. Test all lubricators, valves and BOP's to working pressure.
4. Wellhead isolation tools will continue to be used to isolate the wellhead during the frac.
5. Monitor the surface casing during frac:
 - a. Lay a flowline to the flow back tank and keep the valve open.
 - b. This line will remain in place until a wire line set retrievable packer is in place isolating the 5" casing from the 7" after the frac.
6. 2 7/8" tubing will be run to isolate the 7" casing during the flow back of the well.
7. Well pressure and annulus pressure would be monitored during this time until the well is ready for pump.

Completion Information (Wasatch Formation)

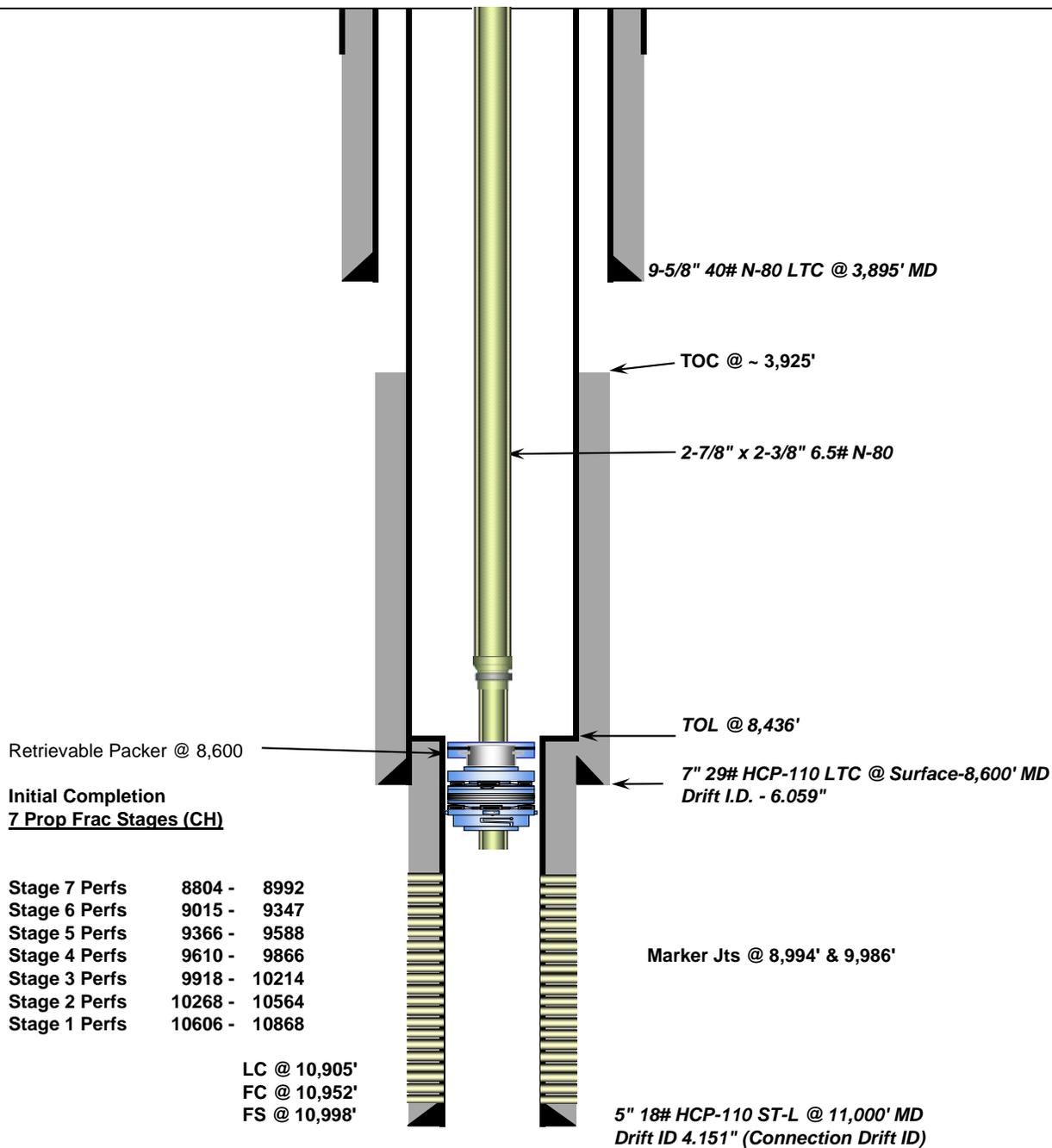
- Stage 1: RU WL unit with 10K lubricator and test to 10000 psi with water. Perforations from ~10606' - 10868' with ~5000 gallons of 15% HCL acid, ~3000# of 100 mesh sand and ~140000# PowerProp Precured Resin Coated 20/40 Sand.
- Stage 2: RU 10K lubricator and test to 10000 psi with water. Set 10K CBP @ ~10574'. Test CBP and casing to 8500 psi. Perforations from ~10268' - 10564' with ~5000 gallons of 15% HCL acid, ~3000# of 100 mesh sand and ~150000# PowerProp Precured Resin Coated 20/40 Sand.
- Stage 3: RU WL unit with 10K lubricator and test to 10000 psi with water. Set 10K CBP @ ~10224'. Test CBP and casing to 8500 psi. Perforations from ~9918' - 10214' with ~5000 gallons of 15% HCL acid, ~3000# of 100 mesh sand and ~150000# PowerProp Precured Resin Coated 20/40 Sand.
- Stage 4: RU 10K lubricator and test to 10000 psi with water. Set 10K CBP @ ~9876'. Test CBP and casing to 8500 psi. Perforations from ~9610' - 9866' with ~5000 gallons of 15% HCL acid, ~3000# of 100 mesh sand and ~135000# PowerProp Precured Resin Coated 20/40 Sand.
- Stage 5: RU 10K lubricator and test to 10000 psi with water. Set 10K CBP @ ~9598'. Test CBP and casing to 8500 psi. Perforations from ~9366' - 9588' with ~5000 gallons of 15% HCL acid, ~3000# of 100 mesh sand and ~125000# TLC Resin Coated 20/40 Sand.
- Stage 6: RU 10K lubricator and test to 10000 psi with water. Set 10K CBP @ ~9357'. Test CBP and casing to 8500 psi. Perforations from ~9015' - 9347' with ~5000 gallons of 15% HCL acid, ~3000# of 100 mesh sand and ~150000# TLC Resin Coated 20/40 Sand.
- Stage 7: RU 10K lubricator and test to 10000 psi with water. Set 10K CBP @ ~9002'. Test CBP and casing to 8500 psi. Perforations from ~8804' - 8992' with ~5000 gallons of 15% HCL acid, ~3000# of 100 mesh sand and ~110000# TLC Resin Coated 20/40 Sand.



Initial Completion Wellbore Schematic

Company Name: EP Energy
 Well Name: Moore 1-23C4
 Field, County, State: Altamont - Bluebell, Duchesne, Utah
 Surface Location: Lat: 40°12'06.147N Long: 110°17'48.230W
 Producing Zone(s): Wasatch

Last Updated: 5/1/2013
 By: Holden Mayo
 TD: 11,000'
 BHL: _____
 Elevation: _____



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER:
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		7. UNIT or CA AGREEMENT NAME
3. ADDRESS OF OPERATOR: 1001 LOUISIANA CITY HOUSTON STATE TX ZIP 77002		8. WELL NAME and NUMBER: Moore 1-23C4
PHONE NUMBER: (713) 997-5038		9. API NUMBER: 4301351736
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 800' FSL & 0800' FEL AT TOP PRODUCING INTERVAL REPORTED BELOW: 800' FSL & 0800' FEL AT TOTAL DEPTH: 800' FSL & 0800' FEL		10 FIELD AND POOL, OR WILDCAT Altamont
		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 23 3S 4W U
		12. COUNTY Duchesne
		13. STATE UTAH

14. DATE SPUNNED: 3/16/2013	15. DATE T.D. REACHED: 4/16/2013	16. DATE COMPLETED: 5/8/2013	ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/>	17. ELEVATIONS (DF, RKB, RT, GL): 5871 GL
18. TOTAL DEPTH: MD 11,000 TVD 10,987	19. PLUG BACK T.D.: MD TVD	20. IF MULTIPLE COMPLETIONS, HOW MANY? *	21. DEPTH BRIDGE MD PLUG SET: TVD	
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) Sonic, Gamma Ray, Resistivity & Neutron Density			23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)	

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
17.5	13.325 J-55	54.5	0	635		Prem 800	920	Surface	
12.25	9.625 N-80	40	0	3,895		Prem 842	2,112	Surface	
8.75	7 HCP110	29	0	8,600		Prem 420	930	~3925	
6.125	5 HCP110	18	8,436	11,000		Prem 192	282	8436	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	8.399							

26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A) Wasatch	8682	10,868			10,606 10,868	.43	69	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)					10,268 10,564	.43	69	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)					9,918 10,214	.43	69	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)					9,610 9,866	.43	69	Open <input checked="" type="checkbox"/>	Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

WAS WELL HYDRAULICALLY FRACTURED? YES NO IF YES -- DATE FRACTURED: 5/8/2013

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
10606'-10868'	5000 gals 15% HCL acid, 3000# 100 mesh, 140000# 20/40 PowerProp
10268'-10564'	5000 gals 15% HCL acid, 3000# 100 mesh, 150000# 20/40 PowerProp
9918'-10214'	5000 gals 15% HCL acid, 3000# 100 mesh, 152180# 20/40 PowerProp

29. ENCLOSED ATTACHMENTS: <input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS <input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION <input type="checkbox"/> GEOLOGIC REPORT <input type="checkbox"/> CORE ANALYSIS <input type="checkbox"/> DST REPORT <input type="checkbox"/> OTHER: _____	Logs submitted by vendor 30. WELL STATUS: <p align="center" style="font-size: 1.2em;">Producing</p>
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31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 5/8/2013		TEST DATE: 5/22/2013		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 921	GAS – MCF: 589	WATER – BBL: 317	PROD. METHOD: Rod Pump
CHOKE SIZE: 16	TBG. PRESS. 2,090	CSG. PRESS. 0	API GRAVITY 43.40	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 921	GAS – MCF: 589	WATER – BBL: 317	INTERVAL STATUS: Producing

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Sold

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Upper Green River	3916
				Middle Green River	5586
				Lower Green River	6814
				Wasatch	8682

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Maria S. Gomez

TITLE Principal Regulatory Analyst

SIGNATURE

Maria S. Gomez

DATE 11/25/2013

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340
Fax: 801-359-3940

Attachment to Well Completion Report**Form 8 Dated November 26, 2013****Well Name: Moore 1-23C4****Items #27 and #28 Continued****27. Perforation Record**

Interval (Top/Bottom – MD)	Size	No. of Holes	Perf. Status
9366'-9588'	.43	69	Open
9015'-9347'	.43	69	Open
8804'-8992'	.43	69	Open

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
9610'-9866'	5000 gal acid, 3540# 100 mesh, 135420# 20/40 PowerProp
9366'-9588'	5000 gal acid, 3000# 100 mesh, 126880# 20/40 Tempered LC
9015'-9347'	5000 gal acid, 3000# 100 mesh, 150000# 20/40 Tempered LC
8804'-8992'	5000 gal acid, 13000# 100 mesh, 108760# 20/40 Tempered LC

CENTRAL DIVISION

ALTAMONT FIELD
MOORE 1-23C4
MOORE 1-23C4
MOORE 1-23C4

Deviation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

1 General**1.1 Customer Information**

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	MOORE 1-23C4	Wellbore No.	OH
Wellbore Legal Name	MOORE 1-23C4	Common Wellbore Name	MOORE 1-23C4
Project	ALTAMONT FIELD	Site	MOORE 1-23C4
Vertical Section Azimuth		North Reference	True
Origin N/S		Origin E/W	
Spud Date/Time	4/1/2013	UWI	MOORE 1-23C4
Active Datum	KB @5,887.6ft (above Mean Sea Level)		

2 Survey Name**2.1 Survey Name: Survey #3**

Survey Name	Survey #3	Company	El Paso
Started	4/1/2013	Ended	
Tool Name		Engineer	El Paso

2.1.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
0.0	0.00	0.00	0.0	0.00	0.00

2.1.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/1/2013	Tie On	0.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Survey Name: Survey #1

Survey Name	Survey #1	Company	El Paso
Started	4/1/2013	Ended	
Tool Name		Engineer	El Paso

2.2.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
0.0	0.00	0.00	0.0	0.00	0.00

2.2.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/1/2013	Tie On	0.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.3 Survey Name: Survey #2

Survey Name	Survey #2	Company	VAUGHN ENERGY SERVICES LLC (GYRO TECHNOLOGIES INC)
Started	4/1/2013	Ended	
Tool Name	GYRO	Engineer	El Paso

2.3.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
0.0	0.00	0.00	0.0	0.00	0.00

2.3.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/1/2013	Tie On	0.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/1/2013	NORMAL	100.0	0.54	286.41	100.0	0.13	-0.45	0.13	0.54	0.54	0.00	286.41
	NORMAL	200.0	0.57	226.37	200.0	-0.08	-1.26	-0.08	0.56	0.03	-60.03	-117.25
	NORMAL	300.0	0.28	215.46	300.0	-0.62	-1.77	-0.62	0.30	-0.29	-10.91	-169.92
	NORMAL	400.0	0.30	250.33	400.0	-0.91	-2.15	-0.91	0.17	0.02	34.86	101.45
	NORMAL	500.0	1.05	227.49	500.0	-1.61	-3.07	-1.61	0.78	0.75	-22.84	-31.35
	NORMAL	565.0	0.97	233.49	565.0	-2.34	-3.95	-2.34	0.20	-0.12	9.24	128.66
	NORMAL	678.0	1.32	227.20	678.0	-3.80	-5.68	-3.80	0.33	0.31	-5.57	-23.04
	NORMAL	771.0	0.62	241.22	770.9	-4.77	-6.91	-4.77	0.79	-0.75	15.08	168.19
	NORMAL	865.0	1.89	321.90	864.9	-3.79	-8.31	-3.79	2.01	1.35	85.83	99.55
	NORMAL	958.0	2.81	341.50	957.8	-0.42	-9.98	-0.42	1.30	0.99	21.08	51.21
	NORMAL	1,050.0	3.78	351.30	1,049.7	4.71	-11.15	4.71	1.22	1.05	10.65	35.10
	NORMAL	1,144.0	4.70	358.03	1,143.4	11.63	-11.75	11.63	1.11	0.98	7.16	31.79
	NORMAL	1,237.0	4.60	359.61	1,236.1	19.16	-11.91	19.16	0.17	-0.11	1.70	128.77
	NORMAL	1,330.0	4.70	358.11	1,328.8	26.70	-12.06	26.70	0.17	0.11	-1.61	-51.32
	NORMAL	1,423.0	4.61	0.09	1,421.5	34.25	-12.18	34.25	0.20	-0.10	2.13	120.24
4/2/2013	NORMAL	1,516.0	4.39	356.22	1,514.2	41.54	-12.41	41.54	0.40	-0.24	-4.16	-127.84
	NORMAL	1,610.0	4.00	358.11	1,608.0	48.40	-12.75	48.40	0.44	-0.41	2.01	161.42
	NORMAL	1,703.0	3.78	4.71	1,700.8	54.70	-12.61	54.70	0.54	-0.24	7.10	119.43
	NORMAL	1,889.0	3.21	9.72	1,886.4	65.94	-11.23	65.94	0.35	-0.31	2.69	154.30
	NORMAL	1,982.0	3.38	7.61	1,979.3	71.23	-10.42	71.23	0.22	0.18	-2.27	-36.56
	NORMAL	2,075.0	3.38	8.40	2,072.1	76.66	-9.66	76.66	0.05	0.00	0.85	90.39
	NORMAL	2,169.0	3.21	7.21	2,165.9	82.01	-8.93	82.01	0.19	-0.18	-1.27	-158.68
	NORMAL	2,262.0	3.12	8.53	2,258.8	87.09	-8.22	87.09	0.12	-0.10	1.42	141.66
	NORMAL	2,355.0	2.68	9.41	2,351.7	91.74	-7.49	91.74	0.48	-0.47	0.95	174.66
	NORMAL	2,448.0	3.52	8.71	2,444.5	96.71	-6.70	96.71	0.90	0.90	-0.75	-2.93
	NORMAL	2,541.0	3.60	6.11	2,537.4	102.43	-5.96	102.43	0.19	0.09	-2.80	-64.94
	NORMAL	2,635.0	3.60	9.50	2,631.2	108.28	-5.16	108.28	0.23	0.00	3.61	91.69
	NORMAL	2,728.0	3.69	9.01	2,724.0	114.12	-4.21	114.12	0.10	0.10	-0.53	-19.34
	NORMAL	2,821.0	3.60	12.79	2,816.8	119.92	-3.09	119.92	0.28	-0.10	4.06	112.41
4/3/2013	NORMAL	2,914.0	3.30	13.63	2,909.6	125.37	-1.82	125.37	0.33	-0.32	0.90	170.85
	NORMAL	3,007.0	3.21	14.02	3,002.5	130.49	-0.56	130.49	0.10	-0.10	0.42	166.37
	NORMAL	3,101.0	2.99	11.52	3,096.4	135.45	0.57	135.45	0.27	-0.23	-2.66	-149.67
	NORMAL	3,194.0	3.52	5.01	3,189.2	140.67	1.31	140.67	0.69	0.57	-7.00	-38.17
	NORMAL	3,287.0	3.60	2.82	3,282.0	146.43	1.70	146.43	0.17	0.09	-2.35	-60.63
	NORMAL	3,380.0	3.52	2.60	3,374.8	152.20	1.97	152.20	0.09	-0.09	-0.24	-170.42
	NORMAL	3,473.0	3.52	4.31	3,467.7	157.90	2.32	157.90	0.11	0.00	1.84	90.85
	NORMAL	3,566.0	3.38	1.19	3,560.5	163.49	2.59	163.49	0.25	-0.15	-3.35	-128.26
	NORMAL	3,659.0	2.81	2.99	3,653.4	168.50	2.76	168.50	0.62	-0.61	1.94	171.22
	NORMAL	3,752.0	3.30	357.41	3,746.2	173.45	2.76	173.45	0.62	0.53	-6.00	-34.06
	NORMAL	3,833.0	3.69	356.71	3,827.1	178.39	2.51	178.39	0.48	0.48	-0.86	-6.59

2.4 Survey Name: 8.75" HOLE

Survey Name	8.75" HOLE	Company	RYAN SERVICES INC
Started	4/6/2013	Ended	
Tool Name	MWD	Engineer	El Paso

2.4.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
3,833.0	3.69	356.71	3,827.1	178.39	2.51

2.4.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/6/2013	Tie On	3,833.0	3.69	356.71	3,827.1	178.39	2.51	178.39	0.00	0.00	0.00	0.00
4/6/2013	NORMAL	3,919.0	3.69	354.99	3,912.9	183.91	2.11	183.91	0.13	0.00	-2.00	-90.86
	NORMAL	3,981.0	3.78	354.82	3,974.8	187.93	1.75	187.93	0.15	0.15	-0.27	-7.10
	NORMAL	4,074.0	2.90	5.01	4,067.6	193.32	1.68	193.32	1.14	-0.95	10.96	151.01
	NORMAL	4,168.0	1.80	5.32	4,161.5	197.16	2.02	197.16	1.17	-1.17	0.33	179.49
4/7/2013	NORMAL	4,261.0	1.80	359.61	4,254.5	200.08	2.15	200.08	0.19	0.00	-6.14	-92.85
	NORMAL	4,354.0	1.60	2.42	4,347.4	202.84	2.19	202.84	0.23	-0.22	3.02	158.77
	NORMAL	4,447.0	0.79	353.81	4,440.4	204.77	2.18	204.77	0.89	-0.87	-9.26	-171.78
	NORMAL	4,541.0	0.48	312.89	4,534.4	205.68	1.82	205.68	0.56	-0.33	-43.53	-143.65
	NORMAL	4,634.0	0.40	258.71	4,627.4	205.88	1.21	205.88	0.44	-0.09	-58.26	-127.17
	NORMAL	4,727.0	0.70	236.69	4,720.4	205.51	0.42	205.51	0.39	0.32	-23.68	-46.51
	NORMAL	4,820.0	1.01	224.83	4,813.4	204.62	-0.63	204.62	0.38	0.33	-12.75	-35.74
	NORMAL	4,914.0	1.32	215.00	4,907.4	203.14	-1.84	203.14	0.39	0.33	-10.46	-37.79
	NORMAL	5,007.0	1.41	208.61	5,000.4	201.26	-3.00	201.26	0.19	0.10	-6.87	-62.63
	NORMAL	5,100.0	1.80	201.23	5,093.3	198.89	-4.08	198.89	0.47	0.42	-7.94	-31.65
	NORMAL	5,194.0	1.49	204.70	5,187.3	196.41	-5.12	196.41	0.35	-0.33	3.69	163.92
	NORMAL	5,287.0	1.58	201.80	5,280.3	194.12	-6.10	194.12	0.13	0.10	-3.12	-42.25
	NORMAL	5,380.0	1.71	201.23	5,373.2	191.63	-7.08	191.63	0.14	0.14	-0.61	-7.46
	NORMAL	5,473.0	1.49	187.89	5,466.2	189.14	-7.75	189.14	0.46	-0.24	-14.34	-127.12
	NORMAL	5,566.0	1.49	199.43	5,559.1	186.81	-8.32	186.81	0.32	0.00	12.41	95.77
	NORMAL	5,660.0	1.32	209.49	5,653.1	184.71	-9.26	184.71	0.32	-0.18	10.70	129.53
	NORMAL	5,753.0	0.70	183.83	5,746.1	183.21	-9.82	183.21	0.81	-0.67	-27.59	-156.25
	NORMAL	5,847.0	1.01	195.12	5,840.1	181.84	-10.08	181.84	0.37	0.33	12.01	34.24
	NORMAL	5,940.0	1.49	193.50	5,933.1	179.87	-10.57	179.87	0.52	0.52	-1.74	-5.02
	NORMAL	6,033.0	1.58	197.23	6,026.0	177.47	-11.24	177.47	0.14	0.10	4.01	49.86
	NORMAL	6,126.0	1.80	195.12	6,119.0	174.84	-12.00	174.84	0.25	0.24	-2.27	-16.85
	NORMAL	6,219.0	2.02	198.33	6,211.9	171.87	-12.89	171.87	0.26	0.24	3.45	27.54
4/8/2013	NORMAL	6,312.0	2.11	192.70	6,304.9	168.64	-13.78	168.64	0.24	0.10	-6.05	-68.91
	NORMAL	6,406.0	1.49	201.80	6,398.8	165.82	-14.62	165.82	0.72	-0.66	9.68	159.75
	NORMAL	6,500.0	1.58	201.89	6,492.8	163.48	-15.56	163.48	0.10	0.10	0.10	1.58
	NORMAL	6,593.0	2.02	187.69	6,585.8	160.67	-16.25	160.67	0.67	0.47	-15.27	-52.63
	NORMAL	6,686.0	1.41	233.71	6,678.7	158.37	-17.40	158.37	1.56	-0.66	49.48	135.73
	NORMAL	6,779.0	1.49	232.43	6,771.7	156.95	-19.28	156.95	0.09	0.09	-1.38	-22.68
	NORMAL	6,872.0	1.80	255.53	6,864.7	155.85	-21.65	155.85	0.78	0.33	24.84	76.79
	NORMAL	6,965.0	2.11	210.72	6,957.6	154.01	-23.94	154.01	1.63	0.33	-48.18	-101.51
	NORMAL	7,059.0	2.02	213.31	7,051.5	151.14	-25.73	151.14	0.14	-0.10	2.76	135.25
	NORMAL	7,152.0	1.80	240.91	7,144.5	149.06	-27.91	149.06	1.01	-0.24	29.68	116.99
	NORMAL	7,245.0	2.02	233.79	7,237.4	147.38	-30.51	147.38	0.35	0.24	-7.66	-50.76
4/9/2013	NORMAL	7,338.0	2.02	234.72	7,330.4	145.47	-33.17	145.47	0.04	0.00	1.00	90.46
	NORMAL	7,432.0	2.02	238.41	7,424.3	143.64	-35.93	143.64	0.14	0.00	3.93	91.84
	NORMAL	7,525.0	2.02	249.13	7,517.3	142.20	-38.86	142.20	0.41	0.00	11.53	95.36
	NORMAL	7,618.0	2.11	276.20	7,610.2	141.80	-42.09	141.80	1.04	0.10	29.11	98.35
	NORMAL	7,711.0	2.29	302.00	7,703.1	142.97	-45.37	142.97	1.07	0.19	27.74	92.76
	NORMAL	7,804.0	2.68	306.70	7,796.1	145.26	-48.69	145.26	0.47	0.42	5.05	29.95

2.4.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/9/2013	NORMAL	7,898.0	2.50	313.11	7,890.0	147.97	-51.95	147.97	0.36	-0.19	6.82	125.03
	NORMAL	7,992.0	2.02	303.23	7,983.9	150.28	-54.83	150.28	0.66	-0.51	-10.51	-145.80
	NORMAL	8,084.0	2.59	319.79	8,075.8	152.76	-57.53	152.76	0.95	0.62	18.00	57.91
4/10/2013	NORMAL	8,178.0	2.29	304.72	8,169.7	155.45	-60.44	155.45	0.75	-0.32	-16.03	-122.46
	NORMAL	8,271.0	1.89	276.82	8,262.7	156.69	-63.49	156.69	1.16	-0.43	-30.00	-125.01
	NORMAL	8,364.0	2.02	277.69	8,355.6	157.09	-66.64	157.09	0.14	0.14	0.94	13.30
	NORMAL	8,457.0	1.71	266.00	8,448.6	157.21	-69.65	157.21	0.53	-0.33	-12.57	-134.92
	NORMAL	8,550.0	2.59	221.31	8,541.5	155.54	-72.42	155.54	1.96	0.95	-48.05	-85.86

2.5 Survey Name: Survey #4

Survey Name	Survey #4	Company	SRM INTERNATIONAL INC
Started	4/13/2013	Ended	
Tool Name	ETOOL	Engineer	El Paso

2.5.1 Tie On Point

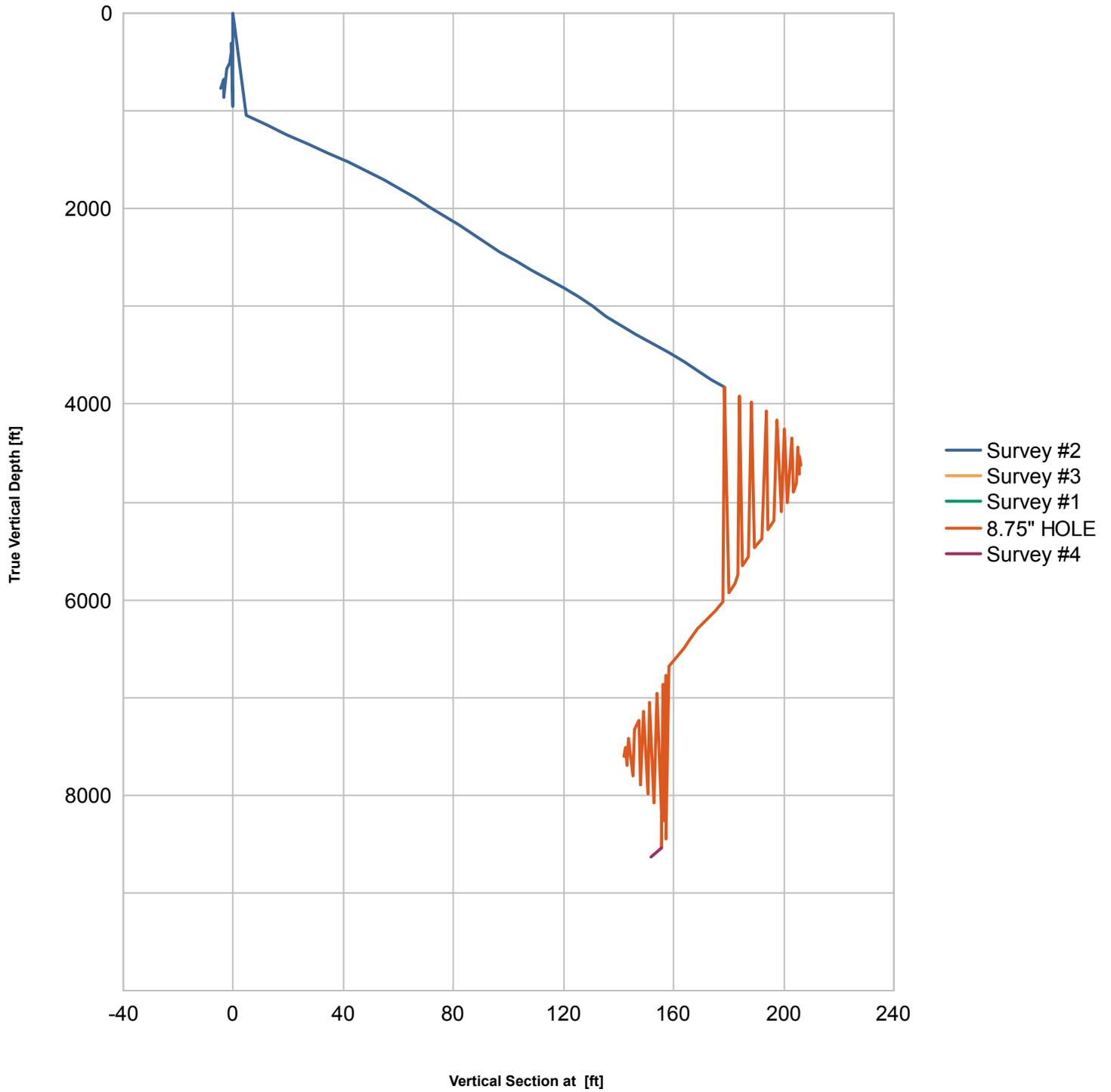
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
8,550.0	2.59	221.31	8,541.5	155.54	-72.42

2.5.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
4/13/2013	Tie On	8,550.0	2.59	221.31	8,541.5	155.54	-72.42	155.54	0.00	0.00	0.00	0.00
4/13/2013	NORMAL	8,635.0	3.39	183.75	8,626.4	151.59	-73.85	151.59	2.43	0.94	-44.19	-87.27

3 Charts

3.1 Vertical Section View



3.2 Plan View

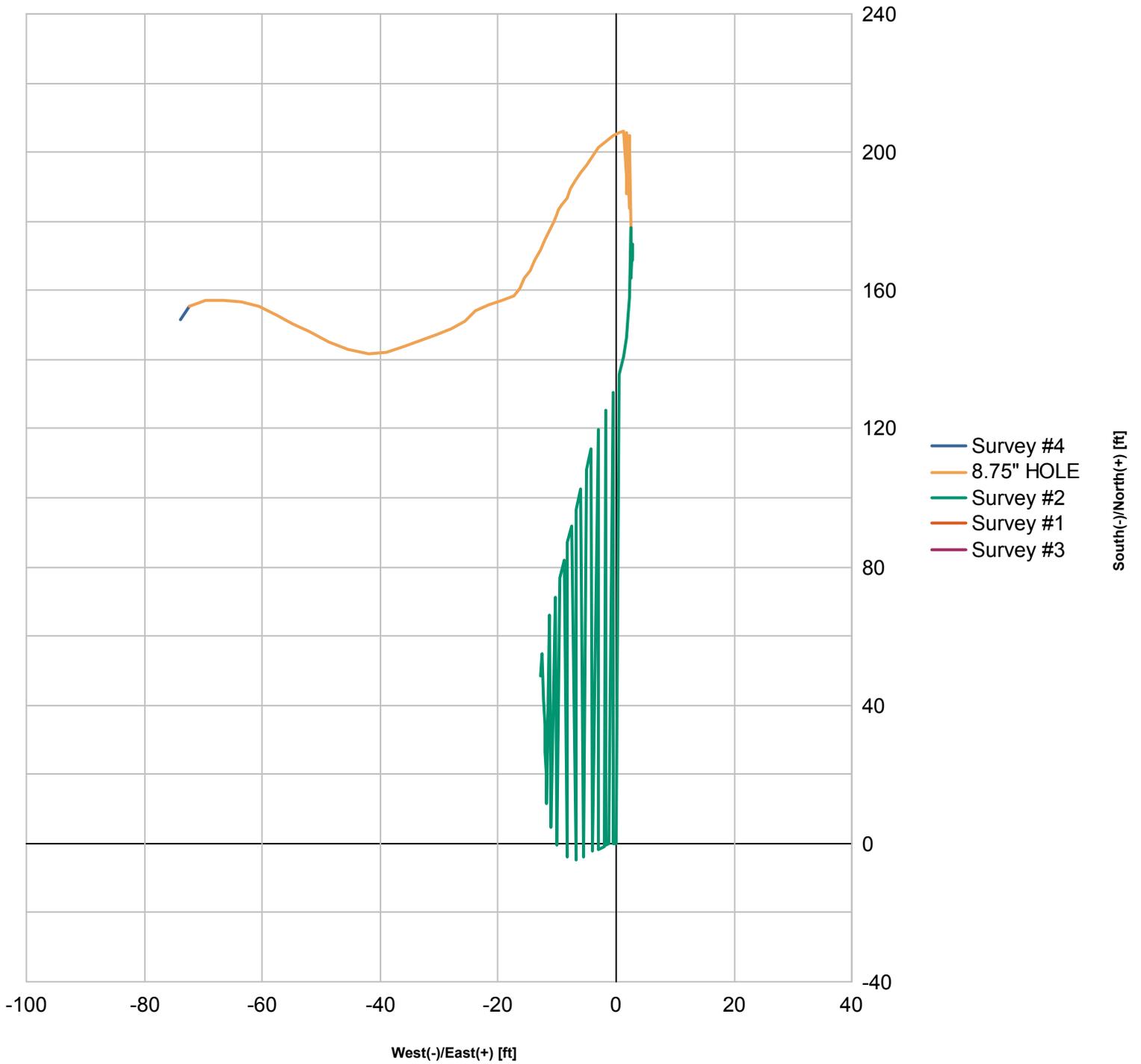


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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL Oil Well		7. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		8. WELL NAME and NUMBER: Moore 1-23C4
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston, TX, 77002		9. API NUMBER: 43013517360000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0800 FSL 0800 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 23 Township: 03.0S Range: 04.0W Meridian: U		9. FIELD and POOL or WILDCAT: NORTH MYTON BENCH
		COUNTY: DUCHESNE
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 9/17/2016	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please see attached proposed recomplection procedure along with current and post WBD's.

Approved by the
August 25, 2016
Oil, Gas and Mining

Date: _____
 By: D. K. Quist

NAME (PLEASE PRINT) Linda Renken	PHONE NUMBER 713 997-5138	TITLE Sr. Regulatory Analyst
SIGNATURE N/A	DATE 8/25/2016	

Moore 1-23 C4 Recom Summary Procedure

- POOH with rods and pump and tubing. Inspect/Repair/Re-furbish as needed. Replace any bad tubing.
- Set 15k CBP for 5" 18# casing @ 8,780' and dump bail 15' cmt on top of plug.
- Stage 1:
 - Perforate new UW/CP 70 interval from **8,466 - 8,698'**.
 - Prop Frac perforations with **130,000** lbs 30/50 prop (w/ **8,000** lbs 100 mesh & **8,000** gals 15% HCl acid) (Stage 1 Recom).
- Stage 2:
 - RIH with 7" CBP & set @ 8,423'.
 - Perforate new LGR interval from **8,331' - 8,408'**.
 - Prop Frac Perforations with **50,000** lbs 30/50 prop (w/ **3,000** lbs 100 mesh & **3,000** gals 15% HCl acid (Stage 2 Recom).
- Stage 3:
 - RIH with 7" CBP & set @ 8,238'.
 - Perforate new LGR interval from **8,104' - 8,213'**.
 - Acid Frac Perforations with **12,000** gals 15% HCl acid (Stage 3 Recom).
- Stage 4:
 - RIH w/ 7" CBP & set @ 7,953'.
 - Perforate new LGR interval from **7,682' - 7,938'**.
 - Prop Frac perforations with **140,000** lbs 30/50 prop (w/ **8,000** lbs 100 mesh & **8,000** gals 15% HCl acid) (Stage 4 Recom).
- Stage 5:
 - RIH w/ 7" CBP & set @ 7,653'.
 - Perforate new LGR interval from **7,468' - 7,638'**.
 - Prop Frac perforations with **100,000** lbs 30/50 prop (w/ **6,000** lbs 100 mesh & **6,000** gals 15% HCl acid) (Stage 5 Recom).
- Clean out well drilling up (4) 7" CBPs, leaving 5" 15k CBP @ 8,780'. (PBTD @ 8,780'). Top perf BELOW plugs @ 8,804'.
- RIH w/ production tubing, pump, and rods.
- Clean location and resume production.



Current Pumping Wellbore Schematic

Company Name: EP Energy
 Well Name: Moore 1-23C4
 Field, County, State: Altamont - Bluebell, Duchesne, Utah
 Surface Location: Lat: 40°12'06.147N Long: 110°17'48.230W
 Producing Zone(s): Wasatch

Last Updated: 11/5/2015
 By: Tomova
 TD: 11,000'
 NHOW: 18,000#
 PICK UP: 27"

-250 Jts 2-7/8" 6.5# N-80 8rd Tubing

9-5/8" 40# N-80 LTC @ 3,895'

TOC @ ~ 3,925'

ROD DETAIL @ 4 SPM
 1-1/2" x 40' Polished Rod
 80 (2,000') - 1" EL Rods W/G
 120 (3,000') - 7/8" EL Rods W/G
 112 (2,800') - 3/4" EL Rods W/G
 16 (400') - 1 1/2" Sinker "K" Bars
 2 1/2" x 1-3/4" x 38' Insert Pump

Tubing Anchor @ ~8,161'
 4 jts 2-7/8" 6.5# N-80 8rd Tubing
 Seating Nipple @ ~8,298'
 2' x 2 7/8" Tubing Sub
 5 1/2" x 33' PBGA
 2 jt 2-7/8" Mud Anchor
 5 3/4" No-Go Nipple
 EOT @ ~8,398'

TOL @ 8,436'

7" 29# HCP-110 LTC @ 8,600'
 Drift I.D. - 6.059"

Initial Completion Perfs - Apr '13

- 8,804' - 8,992' (23'/69 holes)
5,000 Gals 15% HCL + 110,000# 20/40
- 9,015' - 9,347' (23'/69 holes)
5,000 Gals 15% HCL + 150,000# 20/40
- 9,366' - 9,588' (23'/69 holes)
5,000 Gals 15% HCL + 125,000# 20/40
- 9,610' - 9,866' (23'/69 holes)
5,000 Gals 15% HCL + 135,000# 20/40
- 9,918' - 10,214' (23'/69 holes)
5,000 Gals 15% HCL + 150,000# 20/40
- 10,268' - 10,564' (23'/69 holes)
5,000 Gals 15% HCL + 150,000# 20/40
- 10,606' - 10,868' (20'/60 holes)
5,000 Gals 15% HCL + 140,000# 20/40

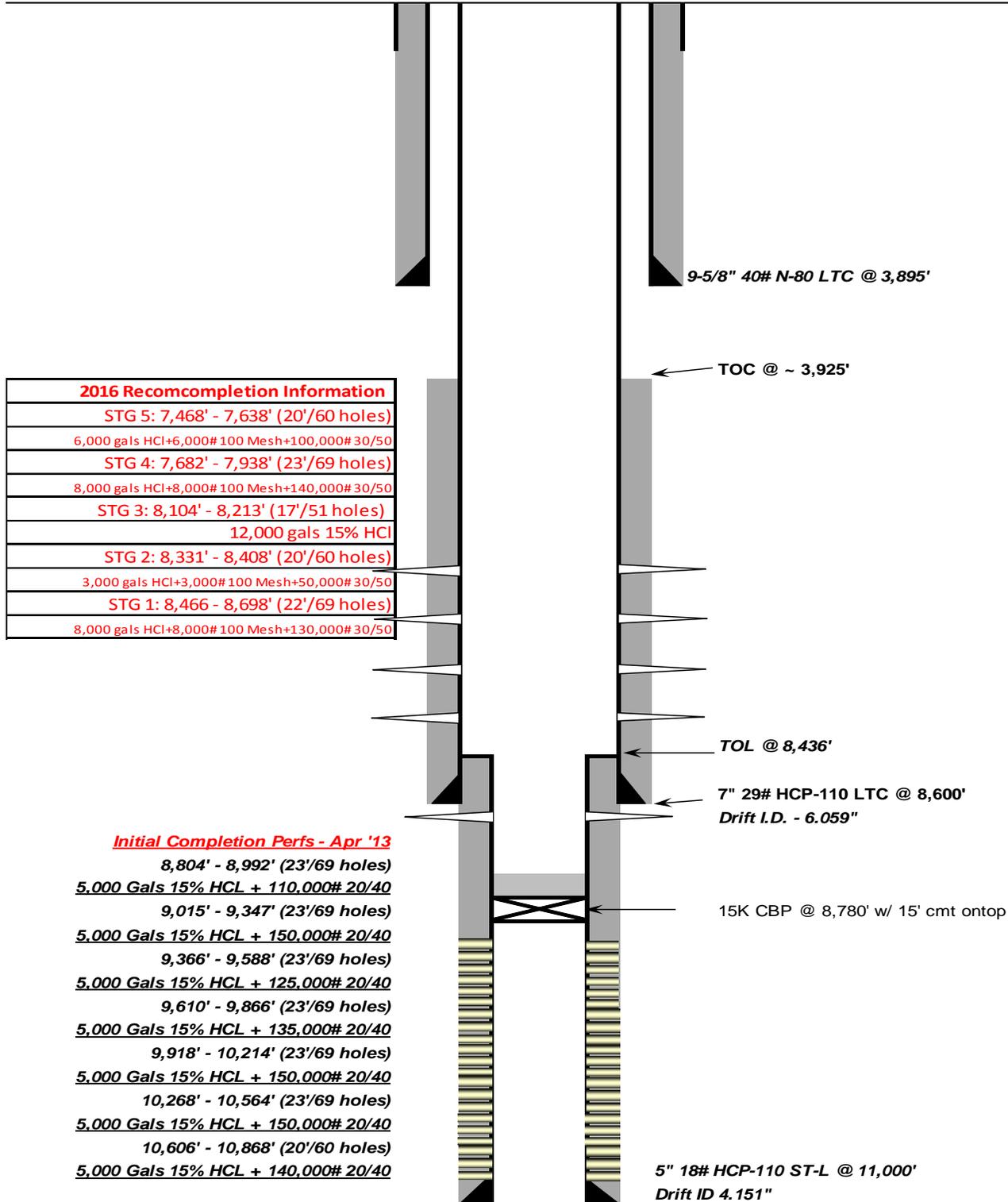
5" 18# HCP-110 ST-L @ 11,000'
 Drift ID 4.151"



Current Pumping Wellbore Schematic

Company Name: EP Energy
 Well Name: Moore 1-23C4
 Field, County, State: Altamont - Bluebell, Duchesne, Utah
 Surface Location: Lat: 40°12'06.147N Long: 110°17'48.230W
 Producing Zone(s): Wasatch

Last Updated: 8/25/2016
 By: Fondren
 TD: 11,000'
 NHOW: _____
 PICK UP: _____



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT FORM 8
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:

9. API NUMBER:

10 FIELD AND POOL, OR WILDCAT

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

U . S . B . & M .

12. COUNTY

13. STATE

UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL GAS WELL DRY OTHER _____

b. TYPE OF WORK: NEW WELL HORIZ. LATS. DEEP-EN RE-ENTRY DIFF. RESVR. OTHER _____

2. NAME OF OPERATOR:

3. ADDRESS OF OPERATOR: CITY STATE ZIP PHONE NUMBER:

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE:

AT TOP PRODUCING INTERVAL REPORTED BELOW:

AT TOTAL DEPTH:

14. DATE SPUDDED: 15. DATE T.D. REACHED: 16. DATE COMPLETED: ABANDONED READY TO PRODUCE 17. ELEVATIONS (DF, RKB, RT, GL):

18. TOTAL DEPTH: MD TVD 19. PLUG BACK T.D.: MD TVD 20. IF MULTIPLE COMPLETIONS, HOW MANY? * 21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) 23. WAS WELL CORED? NO YES (Submit analysis)
WAS DST RUN? NO YES (Submit report)
DIRECTIONAL SURVEY? NO YES (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A)				
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS:

- ELECTRICAL/MECHANICAL LOGS
- SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION
- GEOLOGIC REPORT
- CORE ANALYSIS
- DST REPORT
- OTHER: _____
- DIRECTIONAL SURVEY

30. WELL STATUS:

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) _____ TITLE _____

SIGNATURE _____ DATE _____

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Attachment to Well Completion Report

Form 8 Dated: _

Well Name: _

Items #27 and #28 Continued

27. Perforation Record

Interval (Top/Bottom-MD)	Hole Size	No. of Holes	Perf. Status

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material

CENTRAL DIVISION

ALTAMONT FIELD
MOORE 1-23C4
MOORE 1-23C4
RECOMPLETE LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

1 General**1.1 Customer Information**

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	MOORE 1-23C4		
Project	ALTAMONT FIELD	Site	MOORE 1-23C4
Rig Name/No.		Event	RECOMPLETE LAND
Start date	9/16/2016	End date	9/29/2016
Spud Date/Time	4/1/2013	UWI	MOORE 1-23C4
Active datum	KB @5,887.6usft (above Mean Sea Level)		
Afe No./Description	167169/57224 / MOORE 1-23C4		

2 Summary**2.1 Operation Summary**

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
9/17/2016	14:30 16:00	1.50	WOR	18		P		MIRU PEAK #2500 HAD 80 BBLS 2% KCL PUMP DOWN CSG
	16:00 17:00	1.00	WOR	18		P		L/D POLISH ROD TRY WORK PUMP OFF SEAT NO LUCK P/U POLISH ROD TIGHT STUFF BOX CLOSE 1" SHUT WELL IN CLOSE 2" CSG VALVE W/ BULL PLUGS SDFN
9/18/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW BACKING RODS OFF
	7:30 8:00	0.50	WOR	18		P		SHUT OFF IGNITION SOURCE OPEN WELL UP CHECK FOR FLOW BOTH TBG & CSG (NO FLOW OPEN WELL UP!)
	8:00 9:30	1.50	WOR	18		P		(TWO HOT OILERS HAD 250 BBLS HOT 2% PUMP DOWN CSG) JAR ON PUMP 1 HOUR SOMETHING GAVE WEIGHT 18K HOOK UP HOT OILER TBG TRY FLUSH NO LUCK!
	9:30 10:30	1.00	WOR	39		P		L/D 2' 2' X 1' PONY TOOH W/ 80 - 1" 4 GPR, 120 - 7/8" 4 GPR, 112 - 3/4" 4 GPR, (10 - 1" BAD, 20 - 7/8" BAD!) WEAR SPOT 4,000' TO 4,700' L/D 16 1-1/2" "C" BARS 3' X 3/4" GUID SUB & 1/2 PULL ROD, CHANGE OVER TBG EQUIPMENT
	10:30 11:30	1.00	WLWORK	21		P		R/U WIRELINE RIH PERF TBG @ 8,210' FLUSH TBG W/ 30 BBLS AS TOOH W/ WIRELINE TOOLS R/D TRUCK
	11:30 13:00	1.50	WOR	16		P		N/D "B" FLANGE, LAND 7 1/16" HANGER IN WELL HEAD W/ PERF SUB BELOW, N/U WEATHERFORD 5K BOP, HOOK UP WEATHERFORD TEST UNIT HIGH LOW ON PIPE RAMS & BLIND RAMS
	13:00 17:30	4.50	WOR	39		P		TOOH W/ 168 JT 2 7/8" YELLOW, 64 - JT 2 7/8" BLUE, 20 JT 2 7/8" RED L/D 5 1/2" PBGA, TAC ECT.
17:30 18:00	0.50	WOR	18		P		CLOSE & LOCK PIE RAMS SHUT CSG VAVLE W/ 2" BULL PLUG INSTALL TIW VAVLE 1 ST BARRIER, NIGHT CAP 2ND BARRIER SDFN	
9/19/2016	6:00 6:00	24.00	WOR	18		P		SDFW
9/20/2016	7:00 8:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW TESTING PUMP LINES

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	8:30 11:30	3.00	WLWORK	22		P		MIRU WEATHERFORD WIRELINE N/U WIRELINE 7 1/16" 5M WIRLINE BOP, PUMP IN SUB W/ PLUG VALVE, 7 1/16" 5M LUB, W/ PACK OFF, P/U 5" GAUGE RING RIH SEEN LT @ 8,440' CONT RIH DOWN 8,800' LOG BACK UP PASS L.T CONT TOOH TOOH, P/U 7" GAUGE RIG RIH DOWN TOP LT @ 8,440'TOOH P/U 5" MAGNUM 15K CBP, RIH CORRELATE W/ SHORT JT & LT @ 8,440' CONT RIH SET 5" CBP @ 8,780' TOOH FILL HOLE W/ 239 BBLS 2% KCL, PRESSURE UP 1500 PSI, HELD GOOD
	11:30 17:30	6.00	WLWORK	22		P		WAIT ON WEATHERFORD PARTS FOR DUMP BAILER, ARRIVE 3:30 FILL BAILER W/ 15' CLASS "C" CEMENT START IN HOLE CANT GET PASS 580' SEEMS BE FIGHT WAX TOOH W/ BAILER BRAKE GLASS BOTTOM BAILER RELEASE CEMENT INTO BUCKETS! R/D TRUCK OUT BLOCKS
	17:30 22:00	4.50	WOR	39		P		TIH OPEN ENDED 100 JT 2 7/8" N-80 TBG 3,250' R/U HOT OILER, CIRC 120 BBLS 2% KCL @ 235 DEGRESS, (TRY GET OIL OUT!) TOOH W/ 100 JT 2 7/8" R/U PRESSURE CONTROL WIRELINE P/U DUMP BAILER RIH DUMP 15' CLASS "C" CEMENT, TOP CBP @ 8,780 TOP CEMENT @ 8,765! TOOH W/ WIRELINE R/D TRUCK
	22:00 22:30	0.50	WOR	18		P		CLOSE & LOCK BLIND RAMS 1ST BARRIER, INSTALL 2" BULL PLUG IN ALL POSSIBLE SPOTS 2ND BARRIER SDFN
9/21/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW N/D BOP, NU 10M MASTER
	7:30 11:00	3.50	WOR	16		P		STEAM W/ HOT OILER WORK AREA, N/D 5K WEATHERFORD BOP, INSTALL 7 1/16" HANGER W/ 2 WC INSTALLED RUN LANDING PINS IN ON HANGER, N/U 10M MANUAL MASTER VAVLE, TEST MASTER LOW 8,500 PSI W/ 7" CSG VAVLE OPEN FILL CSG W/ 15 BBLS HOT OILER, BRAKE OFF TRUCK TIE IN WEATHERFORD TEST UNIT, PRESSURE UP 8,000 PSI, N/U 7 1/16" HYD VALVE, 7 1/16" GOAT HEAD, 7 1/16" HYD SWAB VALVE, 7 1/16" 10M CAP W/ NEEDLE VALVE, TESTING ALL VALVE W/ 9 5/8" CSG OPEN GOING FLAT TANK SHELL TEST W/ WIRELINE
	11:00 14:00	3.00	WLWORK	21		P		(CONTINUED FILLING FRAC TANKS) RU WIRELINE. PERFORATED STAGE 1 MADE 1 PERFORATING RUN PERFORATED FROM 8,698' TO 8,466' 22 NET FT 66 SHOTS. USING 3-1/8" GUN 3 SPF 120 DEGREE PHASING W/ 15 GM. STARTING PRESSURE 1000 PSI FINAL PRESSURE 900 PSI. ALL PERFS CORRELATED TO LONE WOLF CEMENT BOND/GR/CCL RUN #2 29-APR-13. L/D PERF GUN,
	14:00 14:30	0.50	WOR	18		P		CLOSE MASTER VALVE, HYD 10M MASTERS 1ST & 2ND BARRIER, HARD SHUT IN ON CSG VALVES
9/22/2016	6:00 6:00	24.00	WOR	28		P		SHUT DOWN FOR QUATERLY MEETING
9/23/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW, FRAC CREW & WIRELINE ON FRAC SAFETY
	7:30 8:00	0.50	WOR	35		P		PRESSURE TEST LINES TO 8960 PSI.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	8:00 9:30	1.50	WOR	35		P		OPEN PSI 190, BREAKDOWN 9.7 BPM @ 2,845 PSI, PUMP 8,000 GALS 15% HCL AVG RATE 3,000 PSI @ 19.8 BPM GO TO FR-WATER 25 BBLS 3,450 PSI @ 40 BPM, I.S.I.P 2,390, 5 MIN 1,920, 10 MIN 1,675 15 MIN 1,483, 25# HYBOR PAD, 9,000 GALS @ 73 BPM, 100# MESH 3,922 PSI @ 74 BPM 286 BBLS, 30/50 MESH, 10# WATER FRAC G 30/50 18,200 GALS, 20# HYBOR 30/50 1.50 PPG 3,801 75 BPM, 20# HYBOR G 30/50 2.00 PPG 19,825 TOTAL VOLUME, 20# HYBOR G 30/50 3.00 PPG RATE 74.9 3,145 AVG PSI, FLUSH W/ 314 BBLS FR -76 WATER 74 BPM 3,337 PSI SHUT DOWN 5 MIN 2,492, 10 MIN 2,398, 15 MIN 2,348 TOTAL BBLS RECOVERD 3,802
	9:30 11:00	1.50	WLWORK	21		N		P/U 7" CBP & 2ND STAGE PERF GUNS GET STAB INSIDE LUB WENT PRESSURE UP 2,400 PSI NAUTERAL LIES LUBICATOR WAS LEAKING OUT 5 X 7 X/O
	11:00 13:00	2.00	WLWORK	21		P		RIH & SET CBP @ 8,423'. PERFORATE STAGE 2 PERFORATIONS 8331' TO 8,408', USING 3-1/8" HSC GUNS, 15 GRAM CHARGES, 3 JSPF, 120 DEGREE PHASING
	13:00 14:30	1.50	STG02	35		P		TEST PUMP LINES 8,940, OPEN WELL UP, BREAKDOWN 1,800 PSI @ 9.7 BPM 25 BBLS, PUMP 5000 GALS 15% HCL, 2,568 PSI @ 22 BPM, FR - 76 WATER (SPACER) 317 BBLS 2,872 PSI @ 39.6 BPM, I.S.I.P 2,510, 5 MIN 2,340 10 MIN 2,340 15 MIN 2,139, CONT SPACER 25 BBLS, 25# HYBOR 8,000 GALS 75 BPM 3,380 PSI, 100 MESH .50 PPG 3,390 PSI @ 74.5 BPM, SPACER 10# WATER FRAC 9000 GALS 3,540 @ 74.4 BPM, 18,000 GALS .50 PPG 30/50 PROPPANT 10# FRAC G 3,720 PSI 74.4 BPM, 12,500 PROPPANT 1.00 PPG 10# FRAC G 3,590 PSI @ 70.9 BPM, 1.75 PPG PROPPANT FLUID 20# HYBOR G 12,286 3,314 PSI @ 68 BPM, 2.50 PPG 2,800 GALS 20# HYBOR G AVG RATE 69 BPM 3,889 PSI, FLUSH 310 BBLS AVG 70 BPM 3577 PSI SHUT DOWN ISIP 2,915 2,476 BBLS RECOVER
	14:30 16:30	2.00	WLWORK	21		P		RIH SET 7" CBP @ 8,228' PERF PERF STAGE 3 FROM 8,104 TO 8213' 109' 3 SPF 17' 51 SHOT 13 INTERVALS 3 1/8" GUNS 120 PHASE
	16:30 17:30	1.00	WOR	35		P		TEST PUMP LINES 8,900 BREAKDOWN 27.6 BPM @ 3,969 RAT 60 BBLS ISIP 1,830, 5 MIN 1383, 10 MIN 1257, 15 MIN 1250, PUMP 12,000 GAL 15% HCL 50.3 BPM 3,650 PSI AVG LOST SUCK PRESSURE LOST RATE! WENT 315 BBL FLUSH 50 BPM DROP TOTAL 68 BIO BALLS 1,007 BBLS RECOVER
	17:30 19:00	1.50	WLWORK	21		P		RIH SET 7" CBP @ 7,953 PERF FROM 7,682' TO 7,938', 256' OVERALL 3 SPF 23' NET 69 SHOT 17 INTERVAL 3 1/8" GUNS 120 PHASE TOOH L/D SHOT PERF GUNS
	19:00		WOR	31		P		CLOSE MANUEL MASTER ALL HCR 10M HARD SHUT IN SDFN
9/24/2016	7:00 8:30	1.50	WOR	28		P		HELD SAFETY MEETING W/ FRAC, WIRELINE & RIG CREW ALL SAFETY POINTS ON FRACING
	8:30 10:00	1.50	WOR	42		N		HALLIBURTON HAD CHANGE OUT PUMP TRUCK

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	10:00 12:00	2.00	STG04	35		P		TEST PUMP LINE 9,160, BREAKDOWN 3,217 @ 9.7 BPM 25 BBLs, WENT 15% HCL 8,000 GALS 2,590 PSI @ 19.8 BPM, FR - 76 H2O SWEEP 2,756 PSI 39.3 BPM 12,596 GALS, ISIP 1,824, 5 MIN 1,607 10 MIN 1,403, 15 MIN 1,080 (LEAK OFF WAS 744 PSI CHANGE 20# CROSS HOLE STAGE!) 25 BBL SPACER 74 BPM, 20# PAD 214 BBLs 74.3 BPM 2,664, WENT 100 MESH .50 PPG 20# CROSS 12,000 GALS 74.5 BPM 2,679 PSI, WENT 20# SPACER 74.6 BPM 2687 PSI, WENT 20# CROSS 30/50 .50 PPG 2,688 PSI @ 74.5 BPM, WENT 20# CROSS 30/50 1.00 PPG 19,600 GAL 74.6 BPM 2601 PSI, WENT 20# CROSS 30/50 1.50 PPG 20,553 GAL 2425 @ 74.6 BPM, WENT 20# CROSS 30/50 2.00 PPG 21,000 GAL 74.3 BPM @ 2,374, WENT 20# FLUSH 30/50 3.00 PPG 12,600 GAL @ 74.1 BPM 2,412 PSI, WENT FLUSH 11,986 GAL 74.9 BPM 2,641 PSI 3,917 TOTAL BBLs RECOVER
	12:00 13:30	1.50	WLWORK	21		P		RIH W/ WIRLINE SET 7" CBP @ 7,653' PERF FROM 7,500 TO 7,638' 138' OVERALL 3 SPF 15' NET 45 SHOT 3 1/8" 120 PHASE
	13:30 16:00	2.50	WOR	35		N		WAIT ON 20# CROSS LINK FROM VERNAL UTAH YARD
	16:00 17:00	1.00	STG05	35		P		TEST LINE 10,086 BREAKDOWN @ 3631 @ 9.7 BPM, WENT 15% HCL 2,695 @ 19.8 BPM 9,000 GALS, WENT SWEEP FR-76 WATER 12,128, ISIP 1,701 5 MIN 1435 10 MIN 1325, 15 MIN 1165 SPACER 1,050 GALS 75 BPM @ 2265 PSI, WENT 25# PAD 8000 GAL 3,001 74.6 BPM, 25# HYBOR 100 MESH .50 PPG 74.2 BPM 2,996 10,000 GALS, WENT 10# SPACER 74.6 BPM 3,035 7000 GAL, WENT 10# FRAC G 30/50 .50 PPG 3,148 PSI 74.5 BPM 18,000 GALS, WENT 10# FRAC G 30/50 1.00 PPG 2,852 PSI 74.5 BPM, WENT 20# HYBOR G 30/50 2.50 PPG 2605 PSI 70.6 BPM 3,200 GAL, WENT FR-76 FLUSH 11,702 GAL 2722 PSI @ 72.2 BPM SHUT ISIP 2064 5 MIN 1593 10 MIN 1518 15 MIN 1482 TOTAL BBLs RECOVER 2,503
	17:00 18:30	1.50	WOR	18		P		LEFT STACK ALL NIPPLE UP TURN OVER FRAC CREW, 14 CHOKE @ 1,250 PSI, 290 BBLs IN FLOW BANK TANK
9/25/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING RIG CREW & WEATHERFORD ON N/D FRAC STACK
	7:30 9:00	1.50	WOR	16		P		N/D TOP 10M HCR VALVE 10M GOAT HEAD INSTALL 10M NIGHT CAP CONT FLOW
9/26/2016	6:00 6:00	24.00	WOR	18		P		SDFW FLOWING
9/27/2016	7:00 8:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW ON KILLING FLOWING WELL
	8:30 12:30	4.00	WOR	19		P		WELL HAD 75 PSI, PUMP 100 BBLs 10.0 PPG BRINE 1400 PSI ISIP 600 PSI WATCH 30 MIN, BLEED BLACK STILL FLOWING PUMP 130 MORE BBLs 10.0 PPG BRINE 1000 PSI @ 2.5 BPM IN SHUT DOWN 1000 PSI LET WELL SET 45 MIN ITS DOWN 75 PSI BLEED BACK APPROX 3 BBLs WELL DEAD FINSH N/U BOP HYDRILL HIGH & LOW TEST ON STACK WEATHERFORD UNIT TRANSFER 232 BBLs OIL TO #2 PRODUCTION TANK
	12:30 16:30	4.00	WOR	39		P		M/U 6" MILL TOOTH BIT, X/O, TIH W/ 234 JT 2 7/8" N-80 TBG TAG UP ON SAND @ 7,613'
	16:30 18:00	1.50	WOR	18		P		R/U DRILL EQUIPMENT BRAKE CIRC W/ 85 BBLs 2% KCL SWIVEL DOWN 2 JT 2 7/8" N-80 TBG TAG 7" CBP @ 7,652 (39' SAND) CIRC CLEAN W/ 75 BBLs

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	18:00 18:30	0.50	WOR	31		P		R/D POWER SWIVEL L/D 6 JT 2 7/8" N-80 TBG EOT @ 7489 232 JT IN 46 JT OUT
	18:30 19:00	0.50	WOR	18		P		CLOSE & LOCK PIPE RAMS 1ST BARRIER, CLOSE MAIN CSG VALVES W/ NIGHT CAPS 2ND, INSTALL 2 7/8" TIW VALVE 1ST BARRIER NIGHT CAP W/ NEEDLE VALVE 2ND BARRIER SDFN
9/28/2016	6:00 7:30	1.50	WOR	28		P		WORK ON HIGH OPERATIONS PLATFORM & TBG FLOOR
	7:30 8:40	1.17	WOR	19		P		TSIP 300 CSIP 450, PUMP 30 BBLs 10.0 PPG BRINE DOWN TBG KILL IT TIH W/ 3 JT 2 7/8" N-80 TBG, 10' X 2 7/8" PUP JT, R/U POWER SWIVEL START PUMP 4 BPM DOWN TBG BRAKE CIRC W/ 40 BBLs GOIN
	8:40 10:00	1.33	WOR	18		P		START DRILL ON 7" CBP @ 7,652' (APPROX 40 MIN!) FELL PASS IT CIRC CLEAN PUMP 15 BBL 10.0 PPG BRINE DOWN TBG KILL TBG SWIVEL DOWN 10 JT 2 7/8" N-80 TBG TAG REMAINS 1ST PLUG & SAND @ 7,930' BRAKE CIRC W/ 20 BBLs 2%
	10:00 11:30	1.50	WOR	18		P		DRILL UP REMAINS WASH SAND DOWN TAG 2ND CBP @ 7,952 (22' SAND) CIRC CLEAN DRILL UP 7" CBP CIRC CLEAN
	11:30 15:00	3.50	WOR	18		P		SWIVEL DOWN 8 JT 2 7/8" N-80 TBG 253 TOTAL IN TAG 3RD CBP @ 8,228' BRAKE CIRC DRILL UP REMAINS 2ND CBP & 3RD CBP (NO SAND WAS A ACID JOB!) KILL TBG SWIVEL DOWN W/ 5 JT TAG REMAIN 3RD PLUG & SAND @ 8,403'
	15:00 18:00	3.00	WOR	18		P		BRAKE CIRC DRILL UP REMAINS 3RD PLUG WASH DOWN 20' SAND CIRC CLEAN DRILL UP 4TH 7" CBP @ 8423' CIRC CLEAN WENT DOWN TOP LT @ 8,440' DRILL 20 MINS REMAINS OF 7" PLUGS PUMP 25 BBLs 10.0 PPG BRINE KILL TBG
	18:00 18:30	0.50	WOR	24		P		L/D 1 JT 2 7/8" OFF POWER SWIVEL, LD ADDITIONAL 15 JT 2 7/8" TRAILER, PULL DERRICK W/ 20 JT 2 7/8" EOT @ 7,304' 224 JT IN 54 JT OUT
	18:30 19:00	0.50	WOR	31		P		CLOSE & LOCK PIPE RAMS 1ST BARRIER, NIGHT CAP ALL POSSIBLE SPOTS 2ND BARRIER, INSTALL 2 7/8" TIW VALVE & SHUT IT 1 ST BARRIER, NIGHT CAP W/ NEEDLE VALVE 2ND BARRIER SDFN
9/29/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW WORKING W/ FLOWING WELL
	7:30 8:00	0.50	WOR	17		P		CSIP 750, TSIP 500, OPEN WELL UP ON 18 CHOKE TO FLOW BACK TANK, BRING PRETTY GOOD CUT OIL TURN OVER #1 PRODUCTION TANK
	8:00 11:00	3.00	WOR	18		P		WATCH FLOW INTO PRODUCTION TANKS START GAUGE 112 BBLs OIL 13 CHOKE 600 PSI MADE APPROX 73 BBLs
	11:00 12:30	1.50	WOR	15		P		R/U PUMP TBG PUMP 260 BBL 10.0 PPG BRINE, CSG SHOW 300 PSI SHUT IN 20 MIN BLEED DOWN 100 PSI, BLEED GAS OFF PRETTY MUCH DEAD, PUMP 20 BBL 10.0 PPG BRINE CHECK FOR FLOW WEEL DEAD
	12:30 15:00	2.50	WOR	39		P		UNLOCK PIPE RAMS & OPEN TOOH W/ 224 JT 2 7/8" N-80 TBG BIT SUB, 6" BIT
	15:00 17:00	2.00	WOR	39		P		CHANGE OVER 2 3/8" EQUIPMENT M/U 4 1/8" MILL TOOTH BIT BIT SUB, P/U 13 JT 2 3/8" TBG, X/O, TIH W/ 216 JT 2 7/8" N-80 EOT @ 7,449' STAB DRILL RUBBER, PREP DRILL EQUIPMENT (STOP ABOVE TOP PERFS!)
	17:00 17:30	0.50	WOR	31		P		CLOSE & LOCK PIPE RAMS 1 ST BARRIER, CLOSE MAIN CSG VALVE W/ NIGHT CAP 2ND BARRIER, INSTALL 2 7/8" TIW 1ST BARRIER, NIGHT CAP W/ NEEDLE VALVE 2ND BARRIER SDFN HARD SHUT IN!
9/30/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW R/U POWER SWIVEL

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	7:30 8:30	1.00	WOR	39		P		TSIP 500 CSIP 650, OPEN CSG SEND FLOW BACK TANK, PUMP 35 BBL 10.0 PPG BRINE TBG M/U STD W/ DRILL RUBBER ON IT & INSTALL INTO WASHINGTON HEAD TIH W/ 33 JT 2 7/8" N-80 TBG, TAG REMAIN PLUG @ 8,442' LT
	8:30 12:00	3.50	WOR	18		P		R/U POWER SWIVEL BRAKE CIRC 60 BBL 2%, CLEAN OUT REMAIN PLUG, CIRC CLEAN SWIVEL DOWN W/ 8 JT 2 7/8" N-80 TBG TAG FILL @ 8,727 BRAKE CIRC CLEAN DOWN 8,765' (LOST CIRC PLUG BIT OFF!) P/U L/D 1 JT 2 7/8" N-80 TBG R/D POWER SWIVEL L/D ONE MORE JT WAIT WIRELINE
	12:00 14:00	2.00	WLWORK	21		P		R/U WIRELINE TRUCK RIH PERF TBG @ 8,610' TOO R/D TRUCK
	14:00 17:30	3.50	WOR	39		P		L/D 29 JT 2 7/8" N-80 TBG, TOO W/ 226 JT 2 7/8" N-80 TBG, X/O, 13 JT 2 3/8" N-80 TBG, BIT SUB, 4 1/8"
	17:30 19:30	2.00	WOR	39		P		M/U SOLID PLUG 5 3/4" SOLID NO/GO, 2 JT 2 7/8" MUD JT, 5 1/2" PBGA, 2' 2 7/8" PUP JT, MECHANICAL PSN, 2 7/8" X 2 1/4" X 40' PUMP BARREL 4 JT 2 7/8" N-80 TBG, 7" 8RD TAC, R/U HYDRO TEST TRUCK AS M/U BHA, CONT TEST 60 JT 2 7/8" EOT @ 2,423'
	19:30 20:00	0.50	WOR	31		P		TRANSFER 230 BBL OIL IN TO PRODUCTION TANKS CLOSE & LOCK PIPE RAMS 1ST BARRIER, CLOSE ALL CSG VAVLE W/ NIGHT CAP 2ND BARRIER, INSTALL 2 7/8" TIW VAVLE 1ST BARRIER, NIGHT CAP W/ NEEDLE VAVLE 2ND BARRIER
10/1/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW HYDRO TESTING
	7:30 8:00	0.50	WOR	15		P		TSIP 10, CSIP 350, PUMP 100 BBL 10.0 PPG BRINE DOWN CSG BULL HEADING
	8:00 10:30	2.50	WOR	39		P		OPEN WELL UP CONT TIH HYDRO TEST TBG 160 JT 2 7/8" TBG R/D TEST UNIT
	10:30 13:00	2.50	WOR	16		P		SET 7" TAC LAND TBG ON 7 1/16" HANGER N/D WASHINGTON HEAD, 7 1/16" 5K ANNULAR, 5K 7 1/16" BOP, 5K X 10K SPOOL, 10M MASTER VAVLE, PULL 7 1/16" HANGER UP OUT TBG HEAD, INSTALL 10K "B" FLANGE LAND N/U RADIGIN, FLOW "T" RADIGIN INSTALL TIW VAVLE, FLUSH TBG W/ 60 BBL HOT 2% DROP TYPE "T" STAND VAVLE, CHANGE OVER ROD EQUIPMENT
	13:00 18:30	5.50	WOR	39		P		P/U 2 1/4" PUMP PLUNGER, 17 1 1/2" "C" BARS, TIH W/ 52 - 3/4" 4 GPR, 132 - 7/8" 4 GPR, 80 - 1" 4 GPR, SPACE OUT W/ 6' 2' X 1" PONYS P/U NEW 1 1/2" POLISH ROD W/ NEW STUFF BOX & PACKING 0 BBL FILL STROKE TEST 1000 PSI HELD GOOD
	18:30 20:00	1.50	WOR	18		P		RDMO SLIDE UNIT FORWARD HELP HANG OFF TURN OVER OPERATOR

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT FORM 8
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:

9. API NUMBER:

10 FIELD AND POOL, OR WILDCAT

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

U . S . B . & M .

12. COUNTY

13. STATE

UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL GAS WELL DRY OTHER _____

b. TYPE OF WORK: NEW WELL HORIZ. LATS. DEEP-EN RE-ENTRY DIFF. RESVR. OTHER _____

2. NAME OF OPERATOR:

3. ADDRESS OF OPERATOR: CITY STATE ZIP PHONE NUMBER:

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE:

AT TOP PRODUCING INTERVAL REPORTED BELOW:

AT TOTAL DEPTH:

14. DATE SPUDDED: 15. DATE T.D. REACHED: 16. DATE COMPLETED: ABANDONED READY TO PRODUCE 17. ELEVATIONS (DF, RKB, RT, GL):

18. TOTAL DEPTH: MD TVD 19. PLUG BACK T.D.: MD TVD 20. IF MULTIPLE COMPLETIONS, HOW MANY? * 21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) 23. WAS WELL CORED? NO YES (Submit analysis)
WAS DST RUN? NO YES (Submit report)
DIRECTIONAL SURVEY? NO YES (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A)				
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS:

- ELECTRICAL/MECHANICAL LOGS GEOLOGIC REPORT DST REPORT DIRECTIONAL SURVEY
 SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER: _____

30. WELL STATUS:

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) _____ TITLE _____

SIGNATURE _____ DATE _____

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

CENTRAL DIVISION

ALTAMONT FIELD
MOORE 1-23C4
MOORE 1-23C4
RECOMPLETE LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

1 General**1.1 Customer Information**

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	MOORE 1-23C4		
Project	ALTAMONT FIELD	Site	MOORE 1-23C4
Rig Name/No.		Event	RECOMPLETE LAND
Start date	9/16/2016	End date	9/29/2016
Spud Date/Time	4/1/2013	UWI	MOORE 1-23C4
Active datum	KB @5,887.6usft (above Mean Sea Level)		
Afe No./Description	167169/57224 / MOORE 1-23C4		

2 Summary**2.1 Operation Summary**

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
9/17/2016	14:30 16:00	1.50	WOR	18		P		MIRU PEAK #2500 HAD 80 BBLs 2% KCL PUMP DOWN CSG
	16:00 17:00	1.00	WOR	18		P		L/D POLISH ROD TRY WORK PUMP OFF SEAT NO LUCK P/U POLISH ROD TIGHT STUFF BOX CLOSE 1" SHUT WELL IN CLOSE 2" CSG VALVE W/ BULL PLUGS SDFN
9/18/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW BACKING RODS OFF
	7:30 8:00	0.50	WOR	18		P		SHUT OFF IGNITION SOURCE OPEN WELL UP CHECK FOR FLOW BOTH TBG & CSG (NO FLOW OPEN WELL UP!)
	8:00 9:30	1.50	WOR	18		P		(TWO HOT OILERS HAD 250 BBLs HOT 2% PUMP DOWN CSG) JAR ON PUMP 1 HOUR SOMETHING GAVE WEIGHT 18K HOOK UP HOT OILER TBG TRY FLUSH NO LUCK!
	9:30 10:30	1.00	WOR	39		P		L/D 2' 2' X 1' PONYs TOO H W/ 80 - 1" 4 GPR, 120 - 7/8" 4 GPR, 112 - 3/4" 4 GPR, (10 - 1" BAD, 20 - 7/8" BAD!) WEAR SPOT 4,000' TO 4,700' L/D 16 1-1/2" "C" BARS 3' X 3/4" GUID SUB & 1/2 PULL ROD, CHANGE OVER TBG EQUIPMENT
	10:30 11:30	1.00	WLWORK	21		P		R/U WIRELINE RIH PERF TBG @ 8,210' FLUSH TBG W/ 30 BBLs AS TOO H W/ WIRELINE TOOLS R/D TRUCK
	11:30 13:00	1.50	WOR	16		P		N/D "B" FLANGE, LAND 7 1/16" HANGER IN WELL HEAD W/ PERF SUB BELOW, N/U WEATHERFORD 5K BOP, HOOK UP WEATHERFORD TEST UNIT HIGH LOW ON PIPE RAMS & BLIND RAMS
	13:00 17:30	4.50	WOR	39		P		TOOH W/ 168 JT 2 7/8" YELLOW, 64 - JT 2 7/8" BLUE, 20 JT 2 7/8" RED L/D 5 1/2" PBGA, TAC ECT.
17:30 18:00	0.50	WOR	18		P		CLOSE & LOCK PIE RAMS SHUT CSG VAVLE W/ 2" BULL PLUG INSTALL TIW VAVLE 1 ST BARRIER, NIGHT CAP 2ND BARRIER SDFN	
9/19/2016	6:00 6:00	24.00	WOR	18		P		SDFW
9/20/2016	7:00 8:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW TESTING PUMP LINES

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	8:30 11:30	3.00	WLWORK	22		P		MIRU WEATHERFORD WIRELINE N/U WIRELINE 7 1/16" 5M WIRLINE BOP, PUMP IN SUB W/ PLUG VALVE, 7 1/16" 5M LUB, W/ PACK OFF, P/U 5" GAUGE RING RIH SEEN LT @ 8,440' CONT RIH DOWN 8,800' LOG BACK UP PASS L.T CONT TOOH TOOH, P/U 7" GAUGE RIG RIH DOWN TOP LT @ 8,440'TOOH P/U 5" MAGNUM 15K CBP, RIH CORRELATE W/ SHORT JT & LT @ 8,440' CONT RIH SET 5" CBP @ 8,780' TOOH FILL HOLE W/ 239 BBLS 2% KCL, PRESSURE UP 1500 PSI, HELD GOOD
	11:30 17:30	6.00	WLWORK	22		P		WAIT ON WEATHERFORD PARTS FOR DUMP BAILER, ARRIVE 3:30 FILL BAILER W/ 15' CLASS "C" CEMENT START IN HOLE CANT GET PASS 580' SEEMS BE FIGHT WAX TOOH W/ BAILER BRAKE GLASS BOTTOM BAILER RELEASE CEMENT INTO BUCKETS! R/D TRUCK OUT BLOCKS
	17:30 22:00	4.50	WOR	39		P		TIH OPEN ENDED 100 JT 2 7/8" N-80 TBG 3,250' R/U HOT OILER, CIRC 120 BBLS 2% KCL @ 235 DEGRESS, (TRY GET OIL OUT!) TOOH W/ 100 JT 2 7/8" R/U PRESSURE CONTROL WIRELINE P/U DUMP BAILER RIH DUMP 15' CLASS "C" CEMENT, TOP CBP @ 8,780 TOP CEMENT @ 8,765! TOOH W/ WIRELINE R/D TRUCK
	22:00 22:30	0.50	WOR	18		P		CLOSE & LOCK BLIND RAMS 1ST BARRIER, INSTALL 2" BULL PLUG IN ALL POSSIBLE SPOTS 2ND BARRIER SDFN
9/21/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW N/D BOP, NU 10M MASTER
	7:30 11:00	3.50	WOR	16		P		STEAM W/ HOT OILER WORK AREA, N/D 5K WEATHERFORD BOP, INSTALL 7 1/16" HANGER W/ 2 WC INSTALLED RUN LANDING PINS IN ON HANGER, N/U 10M MANUAL MASTER VAVLE, TEST MASTER LOW 8,500 PSI W/ 7" CSG VAVLE OPEN FILL CSG W/ 15 BBLS HOT OILER, BRAKE OFF TRUCK TIE IN WEATHERFORD TEST UNIT, PRESSURE UP 8,000 PSI, N/U 7 1/16" HYD VALVE, 7 1/16" GOAT HEAD, 7 1/16" HYD SWAB VALVE, 7 1/16" 10M CAP W/ NEEDLE VALVE, TESTING ALL VALVE W/ 9 5/8" CSG OPEN GOING FLAT TANK SHELL TEST W/ WIRELINE
	11:00 14:00	3.00	WLWORK	21		P		(CONTINUED FILLING FRAC TANKS) RU WIRELINE. PERFORATED STAGE 1 MADE 1 PERFORATING RUN PERFORATED FROM 8,698' TO 8,466' 22 NET FT 66 SHOTS. USING 3-1/8" GUN 3 SPF 120 DEGREE PHASING W/ 15 GM. STARTING PRESSURE 1000 PSI FINAL PRESSURE 900 PSI. ALL PERFS CORRELATED TO LONE WOLF CEMENT BOND/GR/CCL RUN #2 29-APR-13. L/D PERF GUN,
	14:00 14:30	0.50	WOR	18		P		CLOSE MASTER VALVE, HYD 10M MASTERS 1ST & 2ND BARRIER, HARD SHUT IN ON CSG VALVES
9/22/2016	6:00 6:00	24.00	WOR	28		P		SHUT DOWN FOR QUATERLY MEETING
9/23/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW, FRAC CREW & WIRELINE ON FRAC SAFETY
	7:30 8:00	0.50	WOR	35		P		PRESSURE TEST LINES TO 8960 PSI.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	8:00 9:30	1.50	WOR	35		P		OPEN PSI 190, BREAKDOWN 9.7 BPM @ 2,845 PSI, PUMP 8,000 GALS 15% HCL AVG RATE 3,000 PSI @ 19.8 BPM GO TO FR-WATER 25 BBLS 3,450 PSI @ 40 BPM, I.S.I.P 2,390, 5 MIN 1,920, 10 MIN 1,675 15 MIN 1,483, 25# HYBOR PAD, 9,000 GALS @ 73 BPM, 100# MESH 3,922 PSI @ 74 BPM 286 BBLS, 30/50 MESH, 10# WATER FRAC G 30/50 18,200 GALS, 20# HYBOR 30/50 1.50 PPG 3,801 75 BPM, 20# HYBOR G 30/50 2.00 PPG 19,825 TOTAL VOLUME, 20# HYBOR G 30/50 3.00 PPG RATE 74.9 3,145 AVG PSI, FLUSH W/ 314 BBLS FR -76 WATER 74 BPM 3,337 PSI SHUT DOWN 5 MIN 2,492, 10 MIN 2,398, 15 MIN 2,348 TOTAL BBLS RECOVERD 3,802
	9:30 11:00	1.50	WLWORK	21		N		P/U 7" CBP & 2ND STAGE PERF GUNS GET STAB INSIDE LUB WENT PRESSURE UP 2,400 PSI NAUTERAL LIES LUBICATOR WAS LEAKING OUT 5 X 7 X/O
	11:00 13:00	2.00	WLWORK	21		P		RIH & SET CBP @ 8,423'. PERFORATE STAGE 2 PERFORATIONS 8331' TO 8,408', USING 3-1/8" HSC GUNS, 15 GRAM CHARGES, 3 JSPF, 120 DEGREE PHASING
	13:00 14:30	1.50	STG02	35		P		TEST PUMP LINES 8,940, OPEN WELL UP, BREAKDOWN 1,800 PSI @ 9.7 BPM 25 BBLS, PUMP 5000 GALS 15% HCL, 2,568 PSI @ 22 BPM, FR - 76 WATER (SPACER) 317 BBLS 2,872 PSI @ 39.6 BPM, I.S.I.P 2,510, 5 MIN 2,340 10 MIN 2,340 15 MIN 2,139, CONT SPACER 25 BBLS, 25# HYBOR 8,000 GALS 75 BPM 3,380 PSI, 100 MESH .50 PPG 3,390 PSI @ 74.5 BPM, SPACER 10# WATER FRAC 9000 GALS 3,540 @ 74.4 BPM, 18,000 GALS .50 PPG 30/50 PROPPANT 10# FRAC G 3,720 PSI 74.4 BPM, 12,500 PROPPANT 1.00 PPG 10# FRAC G 3,590 PSI @ 70.9 BPM, 1.75 PPG PROPPANT FLUID 20# HYBOR G 12,286 3,314 PSI @ 68 BPM, 2.50 PPG 2,800 GALS 20# HYBOR G AVG RATE 69 BPM 3,889 PSI, FLUSH 310 BBLS AVG 70 BPM 3577 PSI SHUT DOWN ISIP 2,915 2,476 BBLS RECOVER
	14:30 16:30	2.00	WLWORK	21		P		RIH SET 7" CBP @ 8,228' PERF PERF STAGE 3 FROM 8,104 TO 8213' 109' 3 SPF 17' 51 SHOT 13 INTERVALS 3 1/8" GUNS 120 PHASE
	16:30 17:30	1.00	WOR	35		P		TEST PUMP LINES 8,900 BREAKDOWN 27.6 BPM @ 3,969 RAT 60 BBLS ISIP 1,830, 5 MIN 1383, 10 MIN 1257, 15 MIN 1250, PUMP 12,000 GAL 15% HCL 50.3 BPM 3,650 PSI AVG LOST SUCK PRESSURE LOST RATE! WENT 315 BBL FLUSH 50 BPM DROP TOTAL 68 BIO BALLS 1,007 BBLS RECOVER
	17:30 19:00	1.50	WLWORK	21		P		RIH SET 7" CBP @ 7,953 PERF FROM 7,682' TO 7,938', 256' OVERALL 3 SPF 23' NET 69 SHOT 17 INTERVAL 3 1/8" GUNS 120 PHASE TOOH L/D SHOT PERF GUNS
	19:00		WOR	31		P		CLOSE MANUEL MASTER ALL HCR 10M HARD SHUT IN SDFN
9/24/2016	7:00 8:30	1.50	WOR	28		P		HELD SAFETY MEETING W/ FRAC, WIRELINE & RIG CREW ALL SAFETY POINTS ON FRACING
	8:30 10:00	1.50	WOR	42		N		HALLIBURTON HAD CHANGE OUT PUMP TRUCK

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	10:00 12:00	2.00	STG04	35		P		TEST PUMP LINE 9,160, BREAKDOWN 3,217 @ 9.7 BPM 25 BBLs, WENT 15% HCL 8,000 GALS 2,590 PSI @ 19.8 BPM, FR - 76 H2O SWEEP 2,756 PSI 39.3 BPM 12,596 GALS, ISIP 1,824, 5 MIN 1,607 10 MIN 1,403, 15 MIN 1,080 (LEAK OFF WAS 744 PSI CHANGE 20# CROSS HOLE STAGE!) 25 BBL SPACER 74 BPM, 20# PAD 214 BBLs 74.3 BPM 2,664, WENT 100 MESH .50 PPG 20# CROSS 12,000 GALS 74.5 BPM 2,679 PSI, WENT 20# SPACER 74.6 BPM 2687 PSI, WENT 20# CROSS 30/50 .50 PPG 2,688 PSI @ 74.5 BPM, WENT 20# CROSS 30/50 1.00 PPG 19,600 GAL 74.6 BPM 2601 PSI, WENT 20# CROSS 30/50 1.50 PPG 20,553 GAL 2425 @ 74.6 BPM, WENT 20# CROSS 30/50 2.00 PPG 21,000 GAL 74.3 BPM @ 2,374, WENT 20# FLUSH 30/50 3.00 PPG 12,600 GAL @ 74.1 BPM 2,412 PSI, WENT FLUSH 11,986 GAL 74.9 BPM 2,641 PSI 3,917 TOTAL BBLs RECOVER
	12:00 13:30	1.50	WLWORK	21		P		RIH W/ WIRLINE SET 7" CBP @ 7,653' PERF FROM 7,500 TO 7,638' 138' OVERALL 3 SPF 15' NET 45 SHOT 3 1/8" 120 PHASE
	13:30 16:00	2.50	WOR	35		N		WAIT ON 20# CROSS LINK FROM VERNAL UTAH YARD
	16:00 17:00	1.00	STG05	35		P		TEST LINE 10,086 BREAKDOWN @ 3631 @ 9.7 BPM, WENT 15% HCL 2,695 @ 19.8 BPM 9,000 GALS, WENT SWEEP FR-76 WATER 12,128, ISIP 1,701 5 MIN 1435 10 MIN 1325, 15 MIN 1165 SPACER 1,050 GALS 75 BPM @ 2265 PSI, WENT 25# PAD 8000 GAL 3,001 74.6 BPM, 25# HYBOR 100 MESH .50 PPG 74.2 BPM 2,996 10,000 GALS, WENT 10# SPACER 74.6 BPM 3,035 7000 GAL, WENT 10# FRAC G 30/50 .50 PPG 3,148 PSI 74.5 BPM 18,000 GALS, WENT 10# FRAC G 30/50 1.00 PPG 2,852 PSI 74.5 BPM, WENT 20# HYBOR G 30/50 2.50 PPG 2605 PSI 70.6 BPM 3,200 GAL, WENT FR-76 FLUSH 11,702 GAL 2722 PSI @ 72.2 BPM SHUT ISIP 2064 5 MIN 1593 10 MIN 1518 15 MIN 1482 TOTAL BBLs RECOVER 2,503
	17:00 18:30	1.50	WOR	18		P		LEFT STACK ALL NIPPLE UP TURN OVER FRAC CREW, 14 CHOKE @ 1,250 PSI, 290 BBLs IN FLOW BANK TANK
9/25/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING RIG CREW & WEATHERFORD ON N/D FRAC STACK
	7:30 9:00	1.50	WOR	16		P		N/D TOP 10M HCR VALVE 10M GOAT HEAD INSTALL 10M NIGHT CAP CONT FLOW
9/26/2016	6:00 6:00	24.00	WOR	18		P		SDFW FLOWING
9/27/2016	7:00 8:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW ON KILLING FLOWING WELL
	8:30 12:30	4.00	WOR	19		P		WELL HAD 75 PSI, PUMP 100 BBLs 10.0 PPG BRINE 1400 PSI ISIP 600 PSI WATCH 30 MIN, BLEED BLACK STILL FLOWING PUMP 130 MORE BBLs 10.0 PPG BRINE 1000 PSI @ 2.5 BPM IN SHUT DOWN 1000 PSI LET WELL SET 45 MIN ITS DOWN 75 PSI BLEED BACK APPROX 3 BBLs WELL DEAD FINSH N/U BOP HYDRILL HIGH & LOW TEST ON STACK WEATHERFORD UNIT TRANSFER 232 BBLs OIL TO #2 PRODUCTION TANK
	12:30 16:30	4.00	WOR	39		P		M/U 6" MILL TOOTH BIT, X/O, TIH W/ 234 JT 2 7/8" N-80 TBG TAG UP ON SAND @ 7,613'
	16:30 18:00	1.50	WOR	18		P		R/U DRILL EQUIPMENT BRAKE CIRC W/ 85 BBLs 2% KCL SWIVEL DOWN 2 JT 2 7/8" N-80 TBG TAG 7" CBP @ 7,652 (39' SAND) CIRC CLEAN W/ 75 BBLs

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	18:00 18:30	0.50	WOR	31		P		R/D POWER SWIVEL L/D 6 JT 2 7/8" N-80 TBG EOT @ 7489 232 JT IN 46 JT OUT
	18:30 19:00	0.50	WOR	18		P		CLOSE & LOCK PIPE RAMS 1ST BARRIER, CLOSE MAIN CSG VALVES W/ NIGHT CAPS 2ND, INSTALL 2 7/8" TIW VALVE 1ST BARRIER NIGHT CAP W/ NEEDLE VAVLE 2ND BARRIER SDFN
9/28/2016	6:00 7:30	1.50	WOR	28		P		WORK ON HIGH OPERATIONS PLATFORM & TBG FLOOR
	7:30 8:40	1.17	WOR	19		P		TSIP 300 CSIP 450, PUMP 30 BBLs 10.0 PPG BRINE DOWN TBG KILL IT TIH W/ 3 JT 2 7/8" N-80 TBG, 10' X 2 7/8" PUP JT, R/U POWER SWIVEL START PUMP 4 BPM DOWN TBG BRAKE CIRC W/ 40 BBLs GOIN
	8:40 10:00	1.33	WOR	18		P		START DRILL ON 7" CBP @ 7,652' (APPROX 40 MIN!) FELL PASS IT CIRC CLEAN PUMP 15 BBL 10.0 PPG BRINE DOWN TBG KILL TBG SWIVEL DOWN 10 JT 2 7/8" N-80 TBG TAG REMAINS 1ST PLUG & SAND @ 7,930' BRAKE CIRC W/ 20 BBLs 2%
	10:00 11:30	1.50	WOR	18		P		DRILL UP REMAINS WASH SAND DOWN TAG 2ND CBP @ 7,952 (22' SAND) CIRC CLEAN DRILL UP 7" CBP CIRC CLEAN
	11:30 15:00	3.50	WOR	18		P		SWIVEL DOWN 8 JT 2 7/8" N-80 TBG 253 TOTAL IN TAG 3RD CBP @ 8,228' BRAKE CIRC DRILL UP REMAINS 2ND CBP & 3RD CBP (NO SAND WAS A ACID JOB!) KILL TBG SWIVEL DOWN W/ 5 JT TAG REMAIN 3RD PLUG & SAND @ 8,403'
	15:00 18:00	3.00	WOR	18		P		BRAKE CIRC DRILL UP REMAINS 3RD PLUG WASH DOWN 20' SAND CIRC CLEAN DRILL UP 4TH 7" CBP @ 8423' CIRC CLEAN WENT DOWN TOP LT @ 8,440' DRILL 20 MINS REMAINS OF 7" PLUGS PUMP 25 BBLs 10.0PPG BRINE KILL TBG
	18:00 18:30	0.50	WOR	24		P		L/D 1 JT 2 7/8" OFF POWER SWIVEL, LD ADDITIONAL 15 JT 2 7/8" TRAILER, PULL DERRICK W/ 20 JT 2 7/8" EOT @ 7,304' 224 JT IN 54 JT OUT
	18:30 19:00	0.50	WOR	31		P		CLOSE & LOCK PIPE RAMS 1ST BARRIER, NIGHT CAP ALL POSSIBLE SPOTS 2ND BARRIER, INSTALL 2 7/8" TIW VAVLE & SHUT IT 1 ST BARRIER, NIGHT CAP W/ NEEDLE VAVLE 2ND BARRIER SDFN
9/29/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW WORKING W/ FLOWING WELL
	7:30 8:00	0.50	WOR	17		P		CSIP 750, TSIP 500, OPEN WELL UP ON 18 CHOKE TO FLOW BACK TANK, BRING PRETTY GOOD CUT OIL TURN OVER #1 PRODUCTION TANK
	8:00 11:00	3.00	WOR	18		P		WATCH FLOW INTO PRODUCTION TANKS START GAUGE 112 BBLs OIL 13 CHOKE 600 PSI MADE APPROX 73 BBLs
	11:00 12:30	1.50	WOR	15		P		R/U PUMP TBG PUMP 260 BBL 10.0 PPG BRINE , CSG SHOW 300 PSI SHUT IN 20 MIN BLEED DOWN 100 PSI, BLEED GAS OFF PRETTY MUCH DEAD, PUMP 20 BBL 10.0 PPG BRINE CHECK FOR FLOW WEEL DEAD
	12:30 15:00	2.50	WOR	39		P		UNLOCK PIPE RAMS & OPEN TOOH W/ 224 JT 2 7/8" N-80 TBG BIT SUB, 6" BIT
	15:00 17:00	2.00	WOR	39		P		CHANGE OVER 2 3/8" EQUIPMENT M/U 4 1/8" MILL TOOTH BIT BIT SUB, P/U 13 JT 2 3/8" TBG, X/O, TIH W/ 216 JT 2 7/8" N-80 EOT @ 7,449' STAB DRILL RUBBER, PREP DRILL EQUIPMENT (STOP ABOVE TOP PERFS!)
	17:00 17:30	0.50	WOR	31		P		CLOSE & LOCK PIPE RAMS 1 ST BARRIER, CLOSE MAIN CSG VALVE W/ NIGHT CAP 2ND BARRIER, INSTALL 2 7/8" TIW 1ST BARRIER, NIGHT CAP W/ NEEDLE VAVLE 2ND BARRIER SDFN HARD SHUT IN!
9/30/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW R/U POWER SWIVEL

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity Code	Sub	OP Code	MD from (usft)	Operation
	7:30 8:30	1.00	WOR	39		P		TSIP 500 CSIP 650, OPEN CSG SEND FLOW BACK TANK, PUMP 35 BBL 10.0 PPG BRINE TBG M/U STD W/ DRILL RUBBER ON IT & INSTALL INTO WASHINGTON HEAD TIH W/ 33 JT 2 7/8" N-80 TBG, TAG REMAIN PLUG @ 8,442' LT
	8:30 12:00	3.50	WOR	18		P		R/U POWER SWIVEL BRAKE CIRC 60 BBL 2%, CLEAN OUT REMAIN PLUG, CIRC CLEAN SWIVEL DOWN W/ 8 JT 2 7/8" N-80 TBG TAG FILL @ 8,727 BRAKE CIRC CLEAN DOWN 8,765' (LOST CIRC PLUG BIT OFF!) P/U L/D 1 JT 2 7/8" N-80 TBG R/D POWER SWIVEL L/D ONE MORE JT WAIT WIRELINE
	12:00 14:00	2.00	WLWORK	21		P		R/U WIRELINE TRUCK RIH PERF TBG @ 8,610' TOO R/D TRUCK
	14:00 17:30	3.50	WOR	39		P		L/D 29 JT 2 7/8" N-80 TBG, TOO W/ 226 JT 2 7/8" N-80 TBG, X/O, 13 JT 2 3/8" N-80 TBG, BIT SUB, 4 1/8"
	17:30 19:30	2.00	WOR	39		P		M/U SOLID PLUG 5 3/4" SOLID NO/GO, 2 JT 2 7/8" MUD JT, 5 1/2" PBGA, 2' 2 7/8" PUP JT, MECHANICAL PSN, 2 7/8" X 2 1/4" X 40' PUMP BARREL 4 JT 2 7/8" N-80 TBG, 7" 8RD TAC, R/U HYDRO TEST TRUCK AS M/U BHA, CONT TEST 60 JT 2 7/8" EOT @ 2,423'
	19:30 20:00	0.50	WOR	31		P		TRANSFER 230 BBL OIL IN TO PRODUCTION TANKS CLOSE & LOCK PIPE RAMS 1ST BARRIER, CLOSE ALL CSG VAVLE W/ NIGHT CAP 2ND BARRIER, INSTALL 2 7/8" TIW VAVLE 1ST BARRIER, NIGHT CAP W/ NEEDLE VAVLE 2ND BARRIER
10/1/2016	6:00 7:30	1.50	WOR	28		P		HELD JSA MEETING W/ RIG CREW HYDRO TESTING
	7:30 8:00	0.50	WOR	15		P		TSIP 10, CSIP 350, PUMP 100 BBL 10.0 PPG BRINE DOWN CSG BULL HEADING
	8:00 10:30	2.50	WOR	39		P		OPEN WELL UP CONT TIH HYDRO TEST TBG 160 JT 2 7/8" TBG R/D TEST UNIT
	10:30 13:00	2.50	WOR	16		P		SET 7" TAC LAND TBG ON 7 1/16" HANGER N/D WASHINGTON HEAD, 7 1/16" 5K ANNULAR, 5K 7 1/16" BOP, 5K X 10K SPOOL, 10M MASTER VAVLE, PULL 7 1/16" HANGER UP OUT TBG HEAD, INSTALL 10K "B" FLANGE LAND N/U RADIGIN, FLOW "T" RADIGIN INSTALL TIW VAVLE, FLUSH TBG W/ 60 BBL HOT 2% DROP TYPE "T" STAND VAVLE, CHANGE OVER ROD EQUIPMENT
	13:00 18:30	5.50	WOR	39		P		P/U 2 1/4" PUMP PLUNGER, 17 1 1/2" "C" BARS, TIH W/ 52 - 3/4" 4 GPR, 132 - 7/8" 4 GPR, 80 - 1" 4 GPR, SPACE OUT W/ 6' 2' X 1" PONYS P/U NEW 1 1/2" POLISH ROD W/ NEW STUFF BOX & PACKING 0 BBL FILL STROKE TEST 1000 PSI HELD GOOD
	18:30 20:00	1.50	WOR	18		P		RDMO SLIDE UNIT FORWARD HELP HANG OFF TURN OVER OPERATOR