

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 RW 24-14AGR							
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 RED WASH							
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME RED WASH							
6. NAME OF OPERATOR QEP ENERGY COMPANY						7. OPERATOR PHONE 303 308-3068							
8. ADDRESS OF OPERATOR 11002 East 17500 South, Vernal, Ut, 84078						9. OPERATOR E-MAIL debbie.stanberry@qepres.com							
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU0569			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>							
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')							
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						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		85 FSL 1983 FWL		SESW		14		7.0 S		22.0 E		S	
Top of Uppermost Producing Zone		85 FSL 1983 FWL		SESW		14		7.0 S		22.0 E		S	
At Total Depth		85 FSL 1983 FWL		SESW		14		7.0 S		22.0 E		S	
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 85			23. NUMBER OF ACRES IN DRILLING UNIT 640							
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 861			26. PROPOSED DEPTH MD: 6328 TVD: 6328							
27. ELEVATION - GROUND LEVEL 5278			28. BOND NUMBER ESB000024			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 49-251/49-2153							
Hole, Casing, and Cement Information													
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement				Sacks	Yield	Weight
Prod	7.875	5.5	0 - 6328	17.0	N-80 LT&C	9.5	Halliburton Light , Type Unknown				340	2.95	11.0
							Halliburton Premium , Type Unknown				261	1.48	13.5
Surf	12.25	8.625	0 - 3943	32.0	Unknown	0.0	Halliburton Light , Type Unknown				549	2.89	11.0
							Halliburton Premium , Type Unknown				149	1.49	13.5
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 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 Jan Nelson				TITLE Permit Agent				PHONE 435 781-4331					
SIGNATURE				DATE 11/12/2012				EMAIL jan.nelson@qepres.com					
API NUMBER ASSIGNED 43047533070000				APPROVAL				 Permit Manager					

QEP Energy Company

RW 24-14AGR New Vertical Well Summarized Procedure

1. MIRU.
2. Drill 12 1/4" surface hole to 200', then drill 11" to 3,943'.
3. Run 8 5/8", 32#, HCK-55, LTC casing and cement to surface.
4. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
5. PU straight hole BHA, drill out surface casing and 10' of new formation, run FIT.
6. Drill 7 7/8" hole to 6,328'.
7. TOOH, MIRU Loggers.
8. Log from surface casing to TD.
9. RDMO Loggers.
10. TIH, Circulate.
11. TOOH & LDDP.
12. PU and run 5 1/2", 17.0#, N-80, LTC casing to TD, cement casing.
13. ND BOP's.
14. RDMOL.

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ONSHORE OIL & GAS ORDER NO. 1
 QEP Energy Company
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DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>
Uinta	Surface
Green River	3,053'
Bird's Nest	3,372'
Mahogany Bench	3,893'
TD	6,328'

2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil	Eagle	5,041'
Oil	Gulch	5,548'
Oil	Mesa	5,828'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # 49-251 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not

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DRILLING PROGRAM

depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

3. Operator's Specification for Pressure Control Equipment:

- A. A 3,000 psi double gate, 3,000 psi annular BOP (schematic included) from surface casing point to total depth.
- B. Functional test daily.
- C. All BOP connections subject to pressure shall be flanged, welded or clamped.
- D. Kill line (2" min), 2 choke line valves (3" min), choke line (3" min), 2 kill line valves (2" min) and a check valve, 2 chokes with one remotely controlled from rig floor and a pressure gauge on choke manifold.
- E. Upper and Lower Kelly cock valves with handles and safety valve and subs to fit all drill string connections.
- F. IBOP or float sub available.
- G. Fill up line must be installed above the uppermost preventer.
- H. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- I. Ram type preventers and associated equipment shall be tested to the approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 3M system and individual components shall be operable as designed.

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4. Casing Design:

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Wt.	Grade	Thread	Cond.	MW
17-1/2"	14"	sfc	40'	Steel	Cond.	None	Used	Air
12-1/4" to 200'/11" to Surface TD	8-5/8"	sfc	3,943'	32.0	HCK-55	LTC	New	Air
7-7/8"	5-1/2"	sfc	6,328'	17.0	N-80	LTC	New	8-9.5 ppg

Casing Strengths:				Collapse	Burst	Tensile (min)
8-5/8"	32.0 lb.	HCK-55	LTC	3,740 psi	3,930 psi	452,000 lb.
5-1/2"	17.0 lb.	N-80	LTC	6,290 psi	7,740 psi	348,000 lb.

MINIMUM DESIGN FACTORS:

COLLAPSE: 1.125
BURST: 1.10
TENSION: 1.80

Area Fracture Gradient: 0.65 psi/foot
Maximum anticipated mud weight: 9.5 ppg
Maximum surface treating pressure: 4,000 psi
Over pull margin (minimum): 100,000 lbs

5. Cementing Program

14" Conductor:

Cement to surface with construction cement.

8-5/8" Surface Casing: sfc – 3,943' (MD)

Lead Slurry: 0' – 3,443'. 549 sks (1,587 cu ft) ECONOCEM V4 + 3.0 lb/sk Kol-Seal. Slurry wt: 11.0 ppg, Slurry yield: 2.89 ft³/sk, Slurry volume: 12-1/4" to 200', 11" to Surface TD and hole + 75% excess.

Tail Slurry: 3,443' – 3,943'. 149 sks (222 cu ft) EXPANDACEM V3 + 0.2% HR-800 + 1.0 lb/sk Granulite TR 1/4 + 0.13 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.49 ft³/sk, Slurry volume: 11" to TD and hole + 75% excess.

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5-1/2" Production Casing: sfc – 6,328' (MD)

Lead Slurry: 0' – 4,541'. 340 sks (1,003 cu ft) Extendacem cement + 3.0 lb/sk Kol-Seal. Slurry wt: 11.0 ppg, Slurry yield: 2.95 ft³/sk, Slurry volume: 7-7/8" hole + 25% excess in open hole section.

Tail Slurry: 4,541' – 6,328'. 261 sks (387 cu ft) BONDCEM V1 + 0.2% HR-5 + 3.0 b/sk Kol-Seal + 0.125 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.48 ft³/sk, Slurry volume: 7-7/8" hole + 25% excess.

*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface on the production string. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

6. Auxiliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – no
- C. Monitoring equipment on the mud system – visually and/or PVT/Flow Show
- D. Full opening safety valve on the rig floor – yes
- E. Rotating Head – yes
- F. Request for Variance

Possibility of drilling surface hole with air or aerated fluid:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III Requirements, subsection E. Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is 50' into the Mahogany Bench formation and high pressures are not expected.

1. **Properly lubricated and maintained rotating head** – A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
2. **Blooie line discharge 100 feet from wellbore and securely anchored** – the blooie line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.

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3. **Automatic igniter or continuous pilot light on blooie line** – a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
 4. **Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
 5. **Well Kill Fluid** – A suitable amount of water and weighting agents will be available in the reserve pit during air drilling operations to kill the well, if necessary. No overpressured zones are expected in the area.
 6. **Deflector on the end of the blooie line** – Questar will mount a deflector unit at the end of the blooie line for the purpose of changing the direction and velocity of the air and cuttings flow into the reserve pit. Changing the velocity and direction of the cuttings and air will preserve the pit liner. In the event the deflector washes out due to erosion caused by the sand blasting effect of the cuttings, there will be no problem because the deflector is mounted on the very end of the blooie. A washed out deflector will be easily replaced.
 7. **Flare Pit** – there will be no need of a flare pit during the surface hole air drilling operation because the blooie line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, a flare box will be installed and all flare lines will be routed to the flare box.
- G. All other operations and equipment for air/gas drilling shall meet specifications in Onshore Order #2, Section III Requirements, subsection E. Special Drilling Operations and Onshore Order #1.
- H. Drilling below the 8-5/8" casing will be done with water based mud. Maximum anticipated mud weight is 9.5 ppg.
- I. No minimum quantity of weight material will be required to be kept on location.
- J. Gas detector will be used from surface casing depth to TD.

Gas detector will be used from surface casing depth to TD.

7. Testing, logging and coring program

- A. Cores – none anticipated
- B. DST – none anticipated

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- C. Logging – Mud logging –Surf Casing to TD
GR-SP-Induction, Neutron Density

- D. Formation and Completion Interval: Green River intervals, final determination of completion will be made by analysis of logs.
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

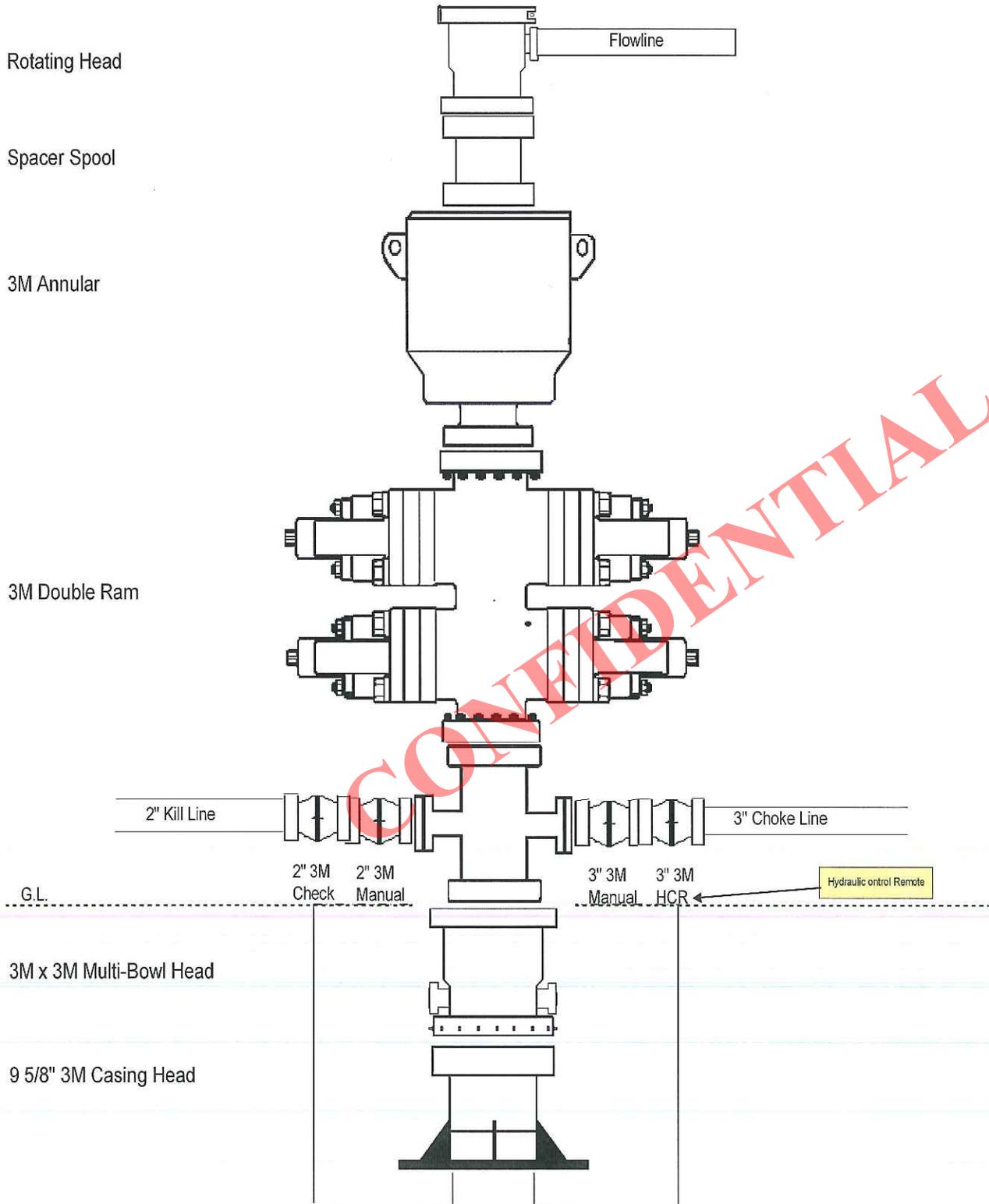
No abnormal temperatures or pressures are anticipated. No H₂S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 2,300 psi. Maximum anticipated bottom hole temperature is 120° F.

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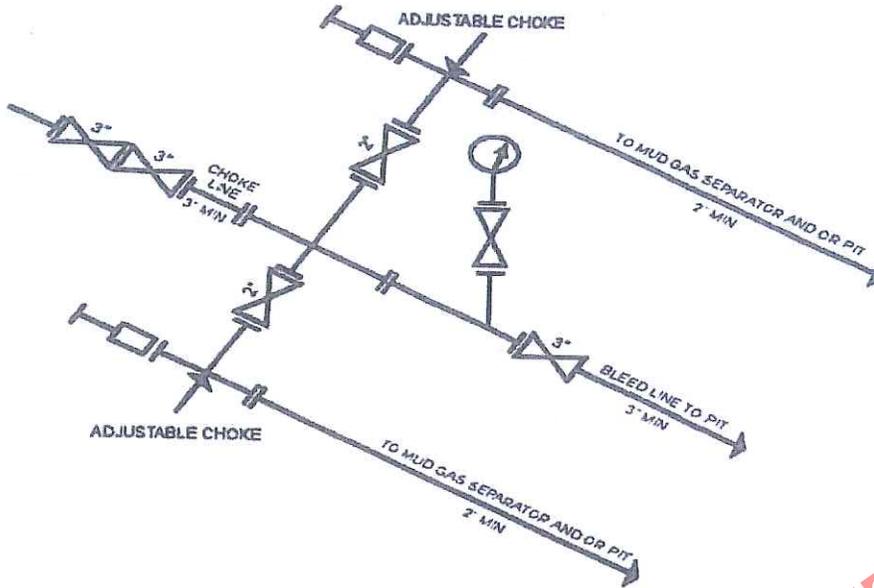
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3M BOP STACK



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DRILLING PROGRAM



3M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY
[54 FR 39528, Sept. 27, 1989]

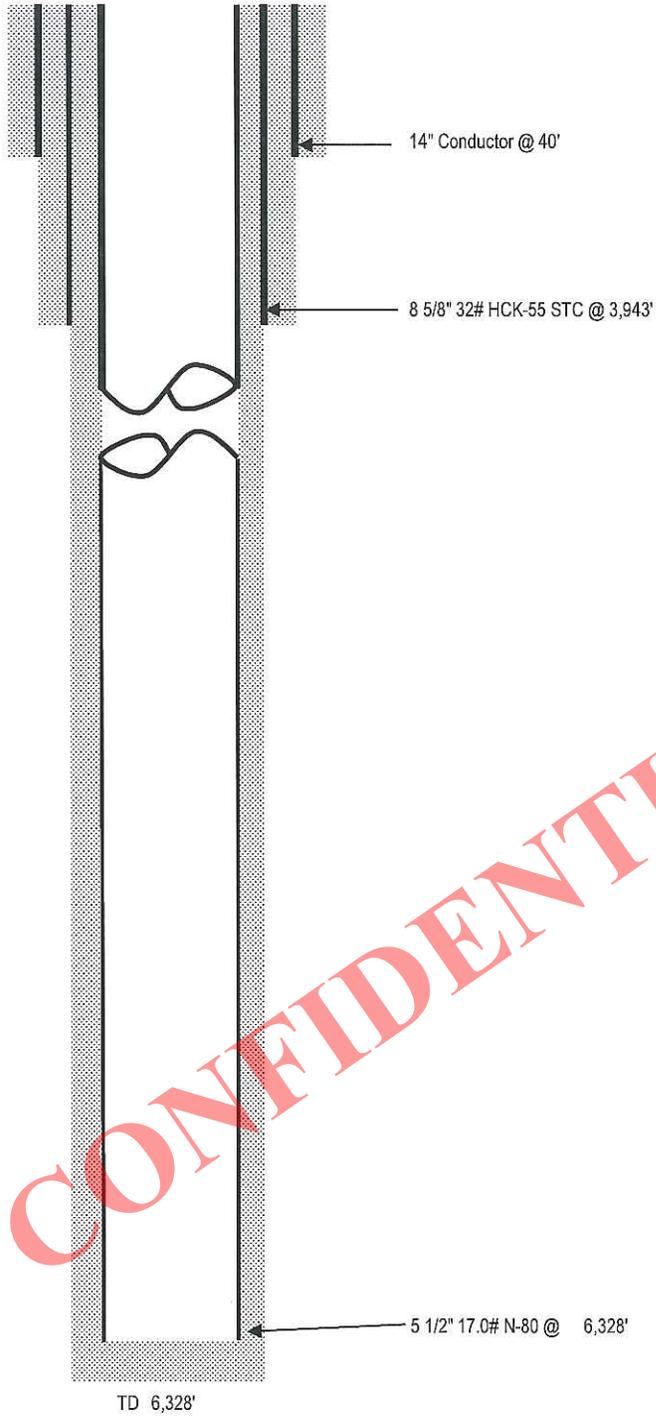
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Modified 11-10-2012 CRA

RW 24-14AGR
API # 43-047
Proposed WBD
Uinta Basin

Sec. 14 T7S-R22E, Uintah Co, UT
LOCATION: 85' FSL, 1,983' FWL

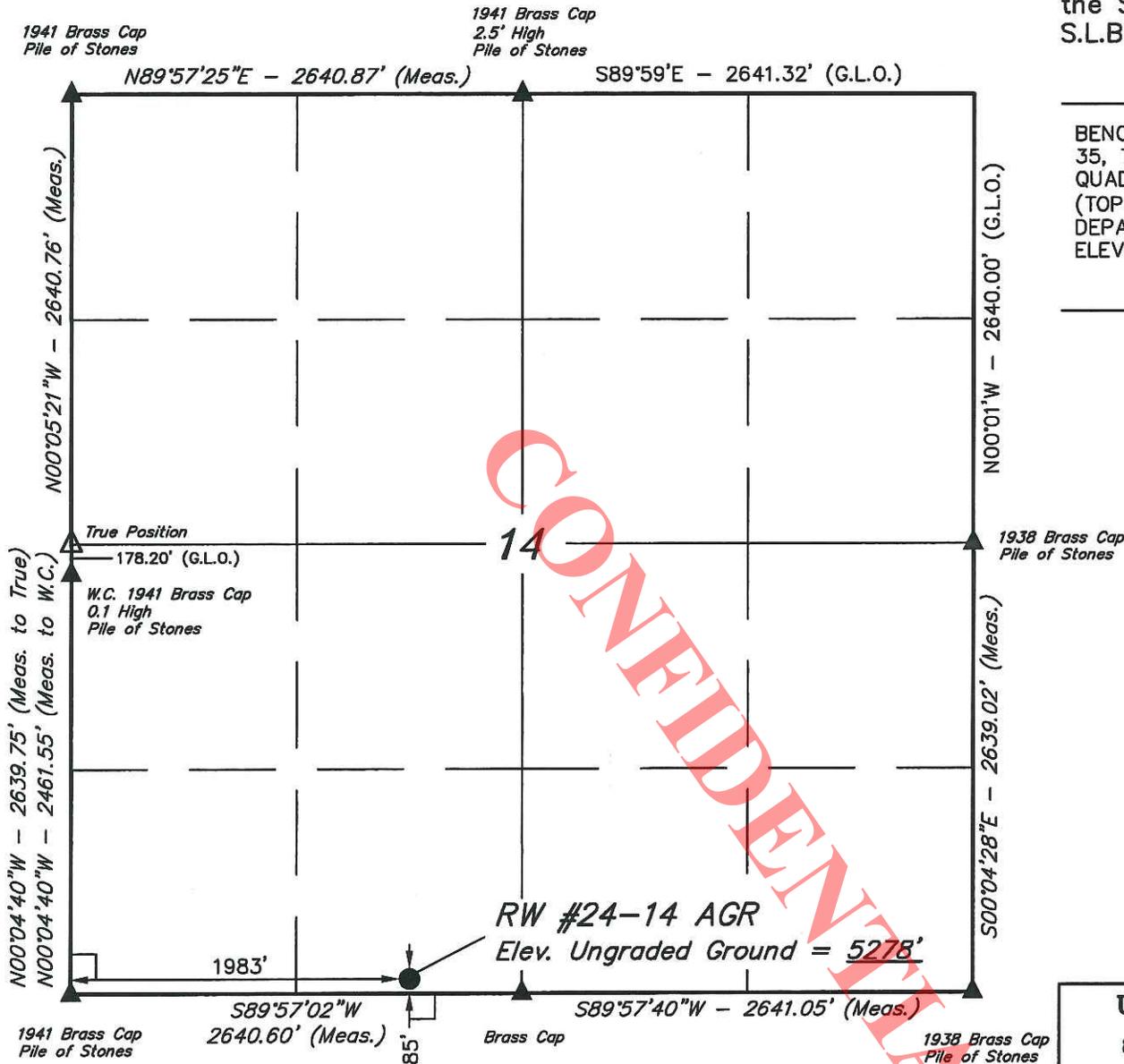
KB 5,285'
GL 5,269'



T7S, R22E, S.L.B.&M.

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Well location, RW #24-14AGR, located as shown in the SE 1/4 SW 1/4 of Section 14, T7S, R22E, S.L.B.&M., Uintah County, Utah.

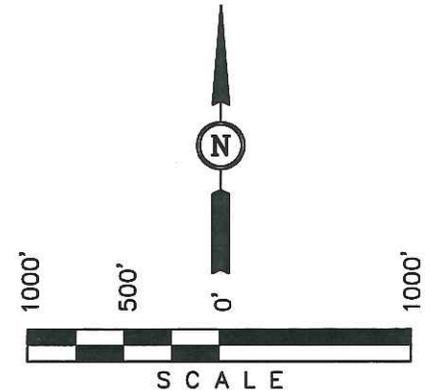


BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert H. Han
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH
06-11-12

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.
- △ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

NAD 83 (SURFACE LOCATION)	
LATITUDE	= 40°12'16.04" (40.204456)
LONGITUDE	= 109°24'34.48" (109.409578)
NAD 27 (SURFACE LOCATION)	
LATITUDE	= 40°12'16.17" (40.204492)
LONGITUDE	= 109°24'32.01" (109.408892)

SCALE 1" = 1000'	DATE SURVEYED: 04-25-12	DATE DRAWN: 06-05-12
PARTY G.O. S.R. R.L.L.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QEP ENERGY COMPANY	

ADT Well Number: 43047533070000

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RW #24-14AGR

LOCATED IN UINTAH COUNTY, UTAH
SECTION 14, T7S, R22E, S.L.B.&M.

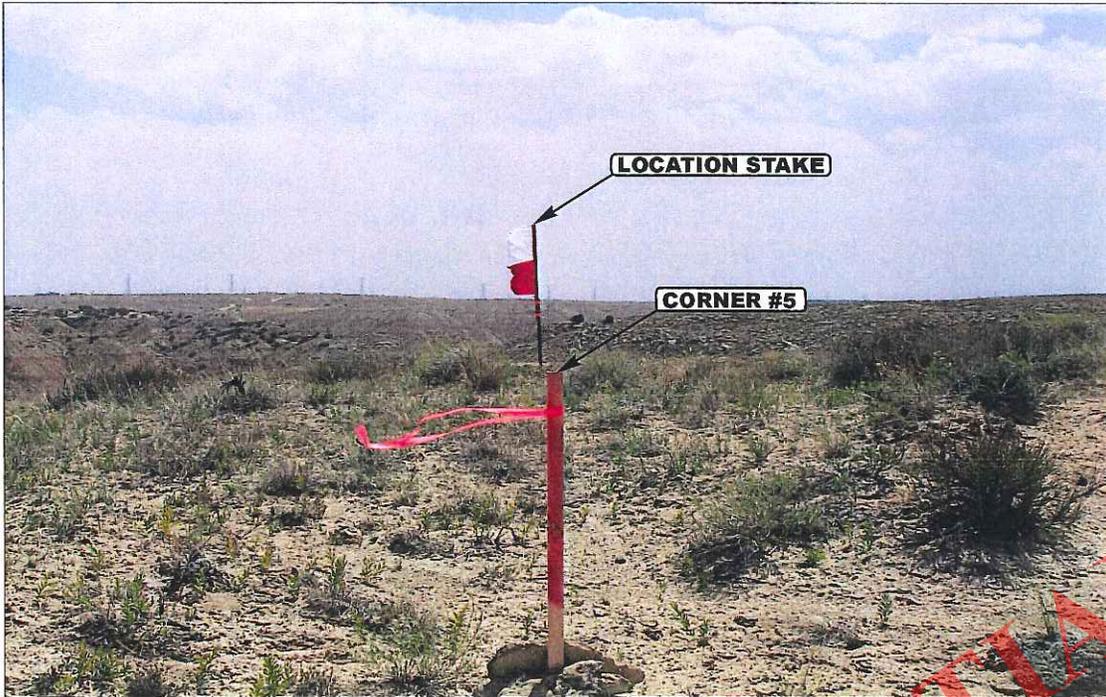


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY



- Since 1964 -

UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	06	07	12	PHOTO
	MONTH	DAY	YEAR	
TAKEN BY: G.O.	DRAWN BY: A.T.		REVISED: 00-00-00	

QEP ENERGY COMPANY
RW #24-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.

PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.9 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 19.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN AN WESTERLY DIRECTION APPROXIMATELY 3.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN RIGHT AND PROCEED IN A NORTHERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 2.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.1 MILE TO THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 288' TO PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 29.1 MILES.

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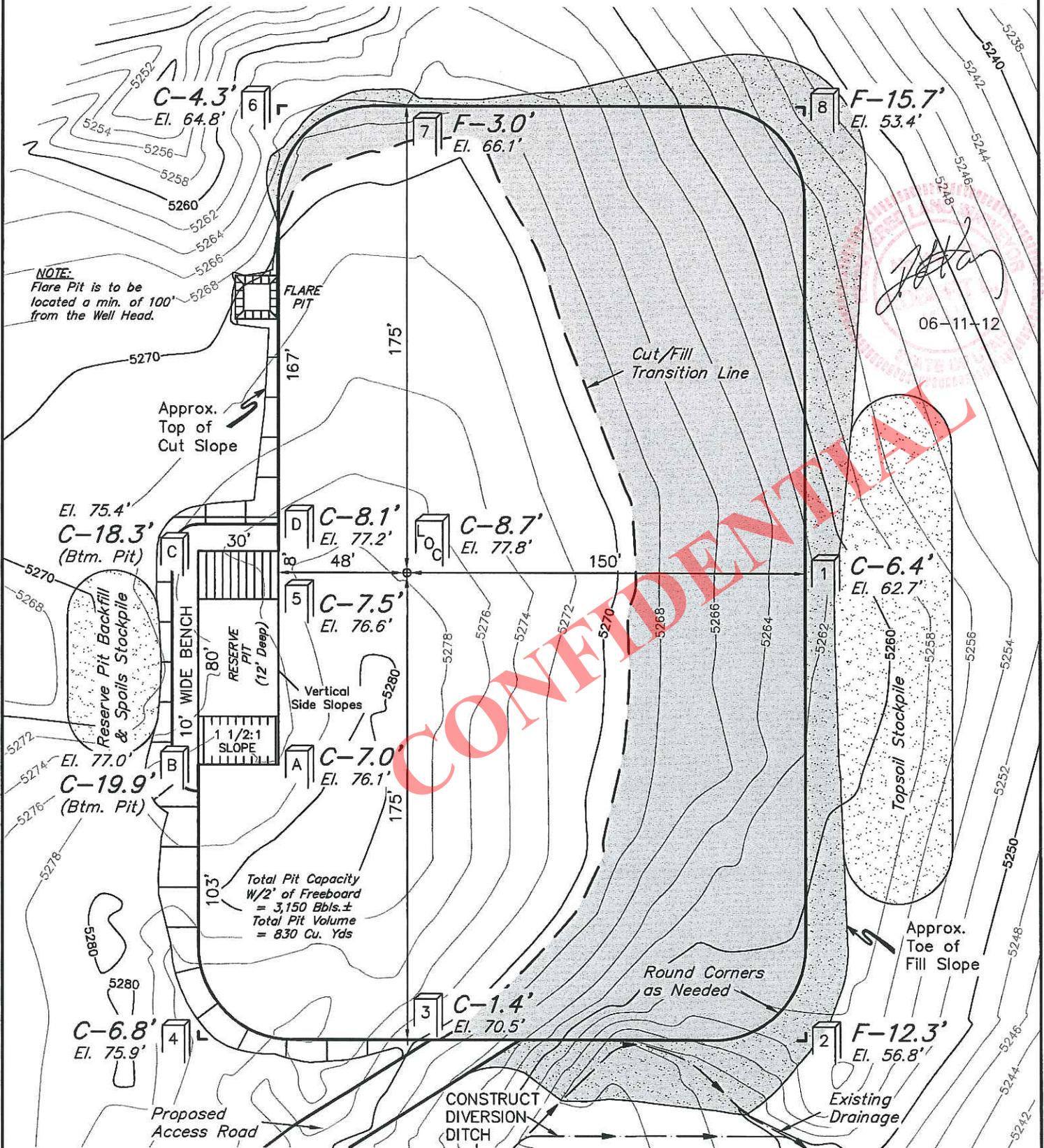
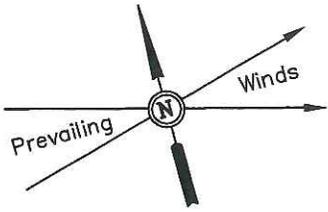
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LOCATION LAYOUT FOR

RW #24-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
85' FSL 1983' FWL

FIGURE #1

SCALE: 1" = 50'
DATE: 06-05-12
DRAWN BY: R.L.L.



Elev. Ungraded Ground At Loc. Stake = 5277.8'
FINISHED GRADE ELEV. AT LOC. STAKE = 5269.1'

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FIGURE #2

TYPICAL CROSS SECTIONS FOR

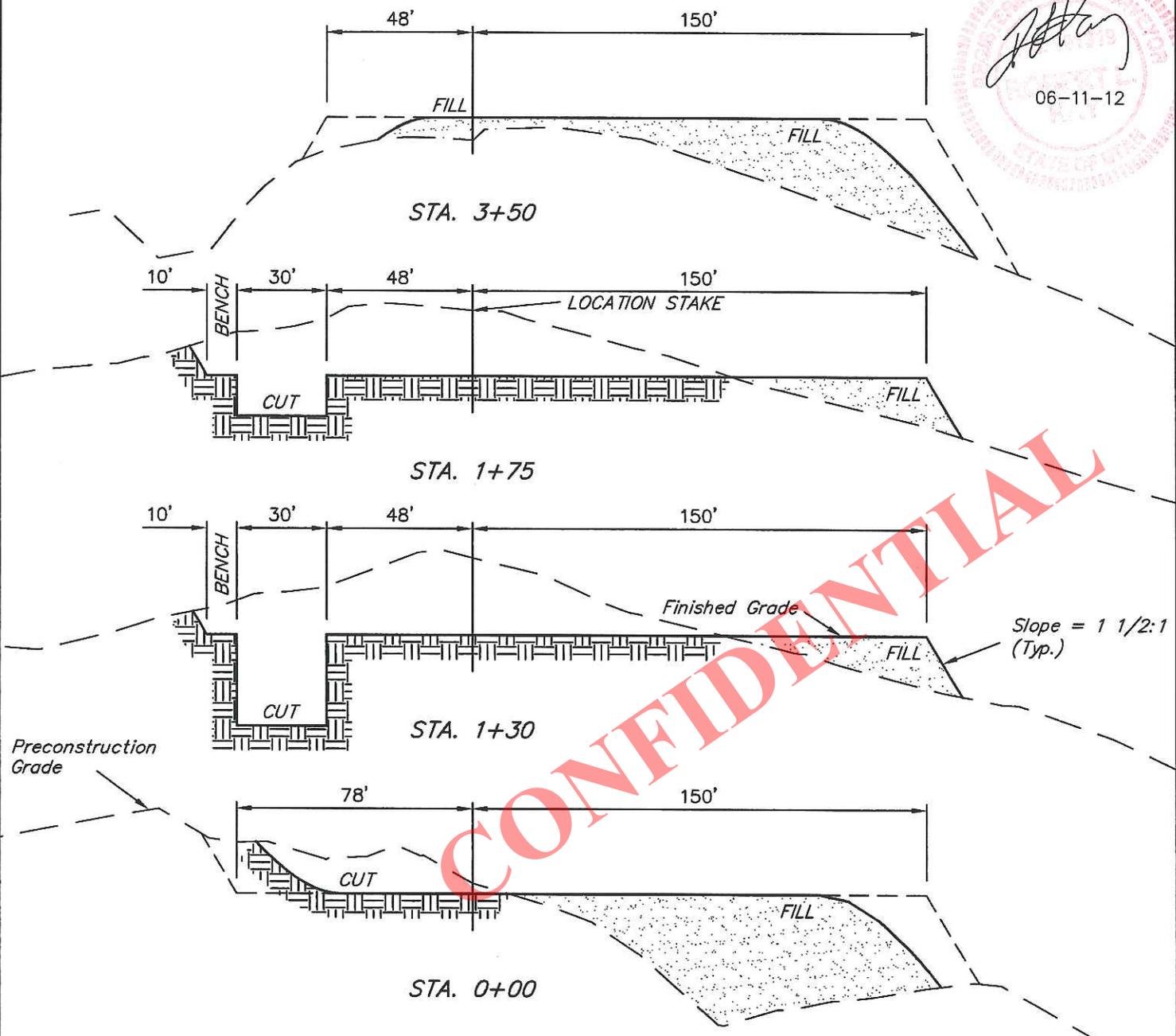
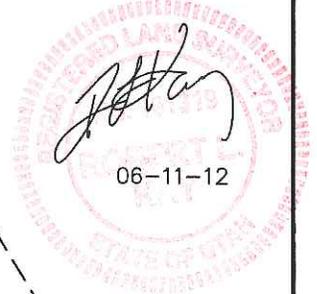
RW #24-14AGR

SECTION 14, T7S, R22E, S.L.B.&M.

85' FSL 1983' FEL

1" = 20'
X-Section Scale
1" = 50'

DATE: 06-05-12
DRAWN BY: R.L.L.



NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ± 2.266 ACRES
ACCESS ROAD DISTURBANCE = ± 0.199 ACRES
PIPELINE DISTURBANCE = ± 0.855 ACRES
TOTAL = ± 3.320 ACRES

*** NOTE:**

FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping = 1,660 Cu. Yds.
Remaining Location = 9,220 Cu. Yds.
TOTAL CUT = 10,880 CU. YDS.
FILL = 8,800 CU. YDS.

EXCESS MATERIAL = 2,080 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.) = 2,080 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation) = 0 Cu. Yds.

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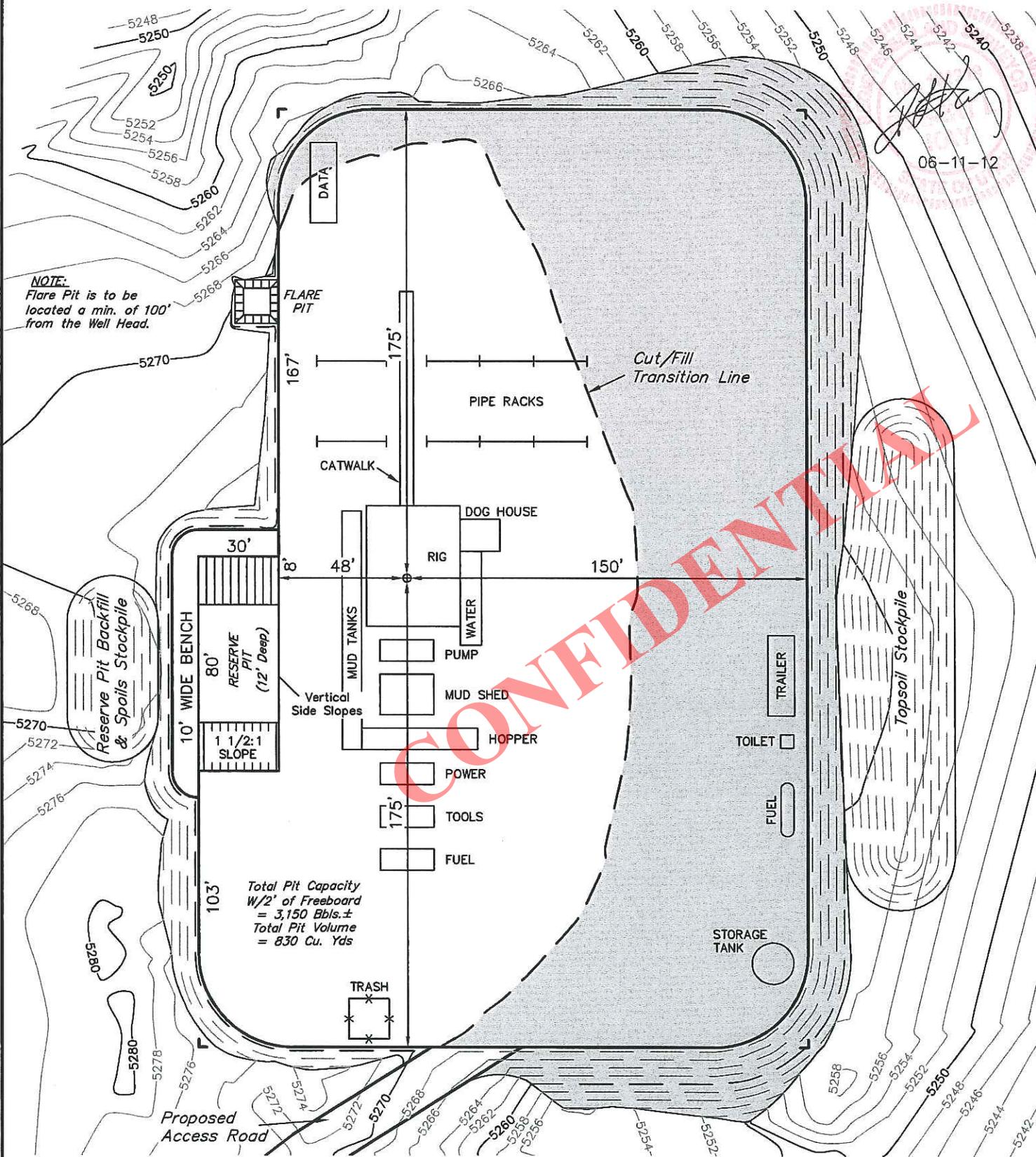
QEP ENERGY COMPANY

TYPICAL RIG LAYOUT FOR

RW #24-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
85' FSL 1983' FEL

FIGURE #3

SCALE: 1" = 50'
DATE: 06-05-12
DRAWN BY: R.L.L.



NOTE:
Flare Pit is to be located a min. of 100' from the Well Head.

Total Pit Capacity
W/2' of Freeboard
= 3,150 Bbbls.±
Total Pit Volume
= 830 Cu. Yds

06-11-12
[Signature]

QEP ENERGY COMPANY

PRODUCTION FACILITY LAYOUT FOR

RW #24-14 AGR

SECTION 14, T7S, R22E, S.L.B.&M.

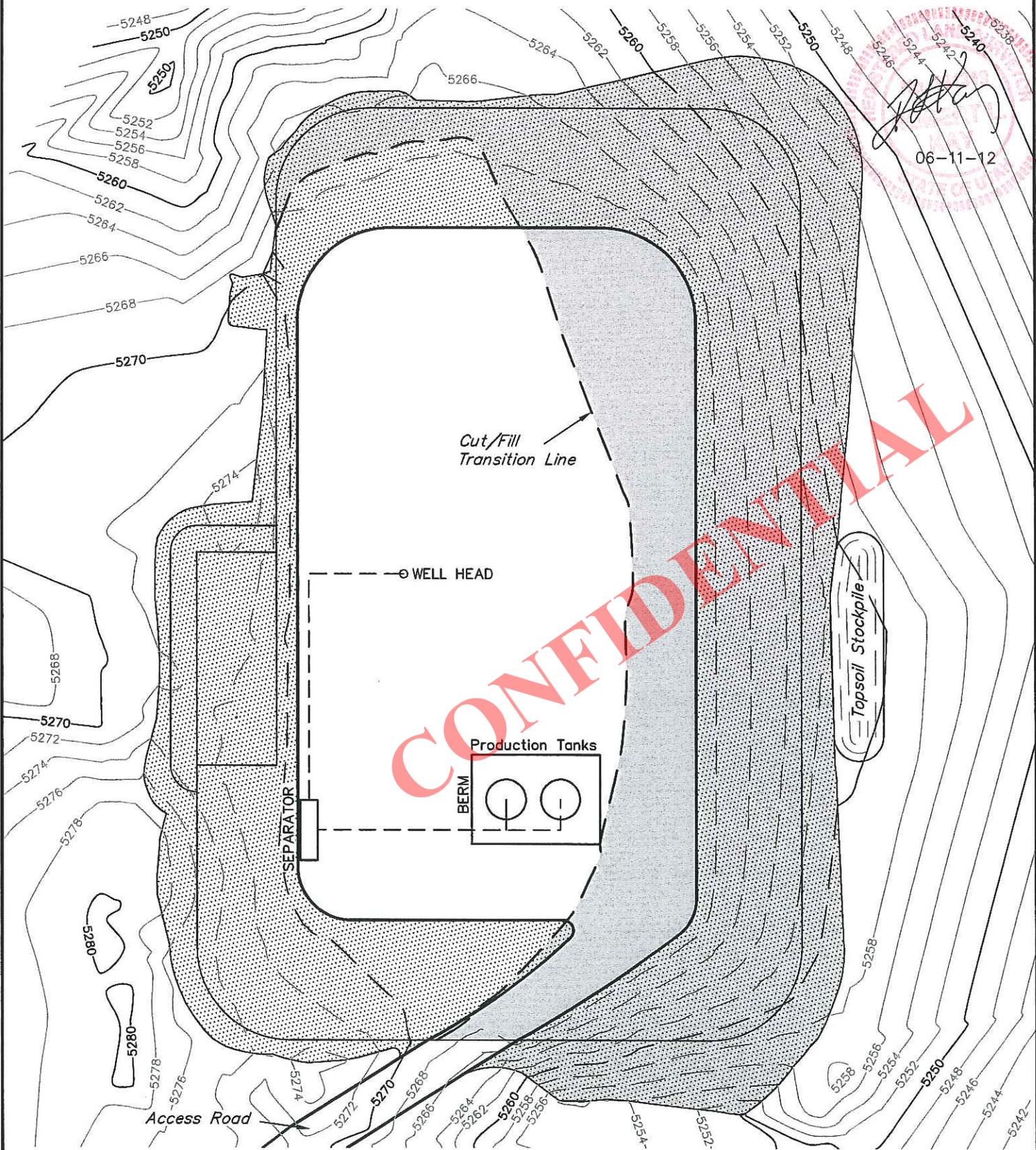
85' FSL 1983' FEL

FIGURE #4

SCALE: 1" = 50'

DATE: 06-05-12

DRAWN BY: R.L.L.



06-11-12

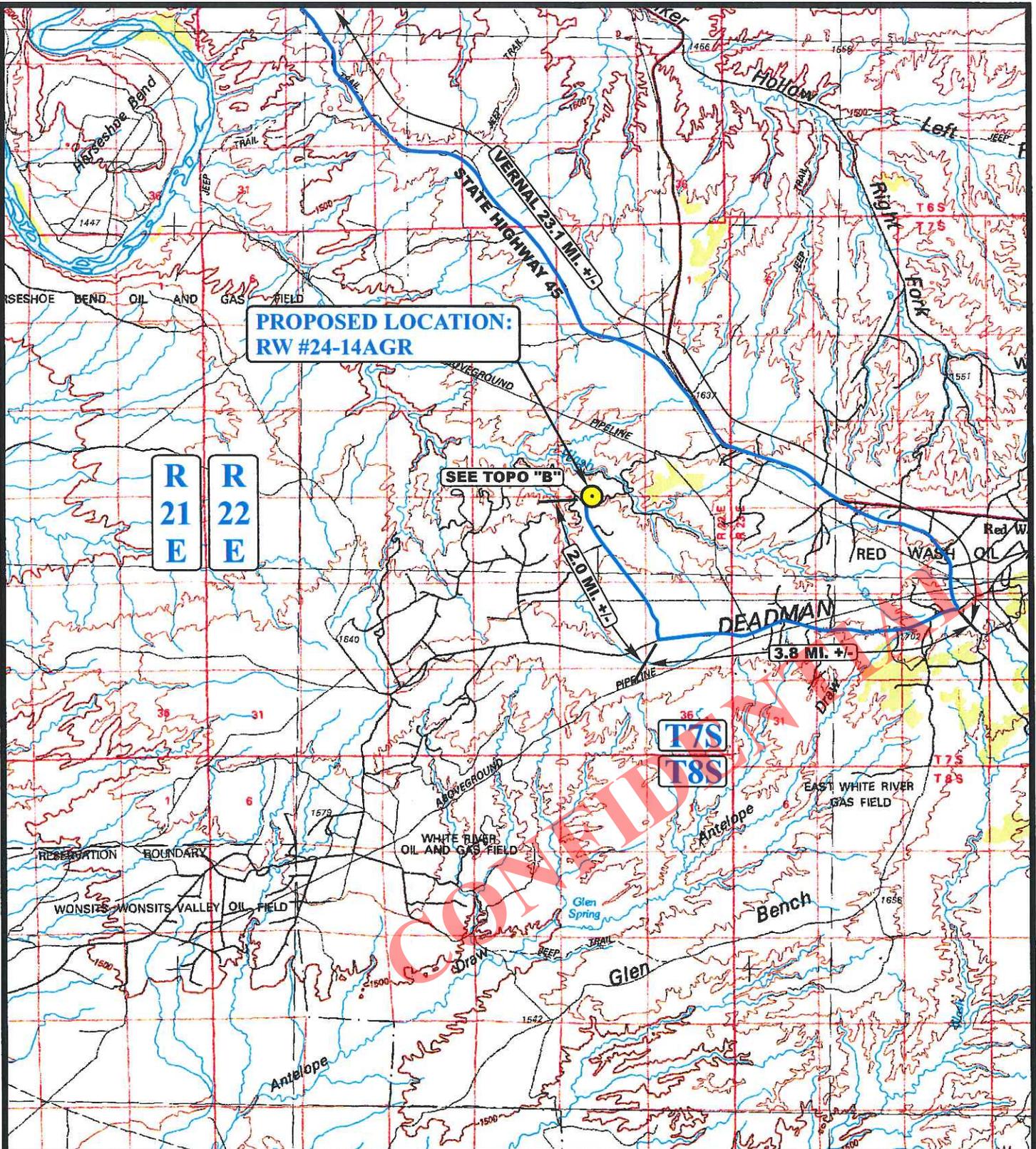
[Signature]

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 RECLAIMED AREA

APPROXIMATE ACREAGES
UN-RECLAIMED = ± 0.919 ACRES

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LEGEND:

 **PROPOSED LOCATION**



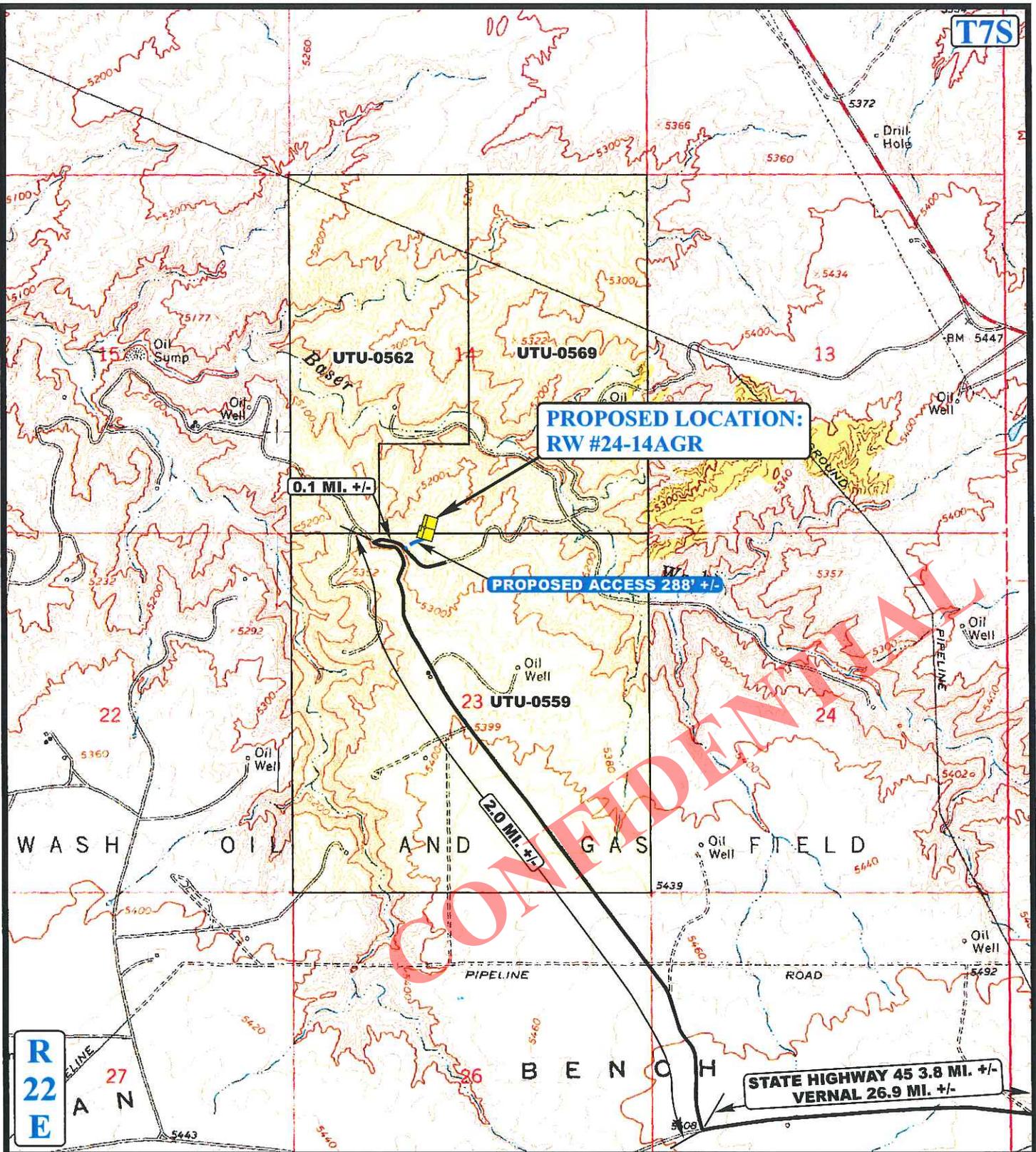
QEP ENERGY COMPANY

RW #24-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
85' FSL 1983' FWL

U E I S
Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC **06 07 12**
MAP MONTH DAY YEAR
 SCALE: 1:100,000 DRAWN BY: A.T. REVISED: 00-00-00





LEGEND:

-  EXISTING ROAD
-  PROPOSED ACCESS ROAD



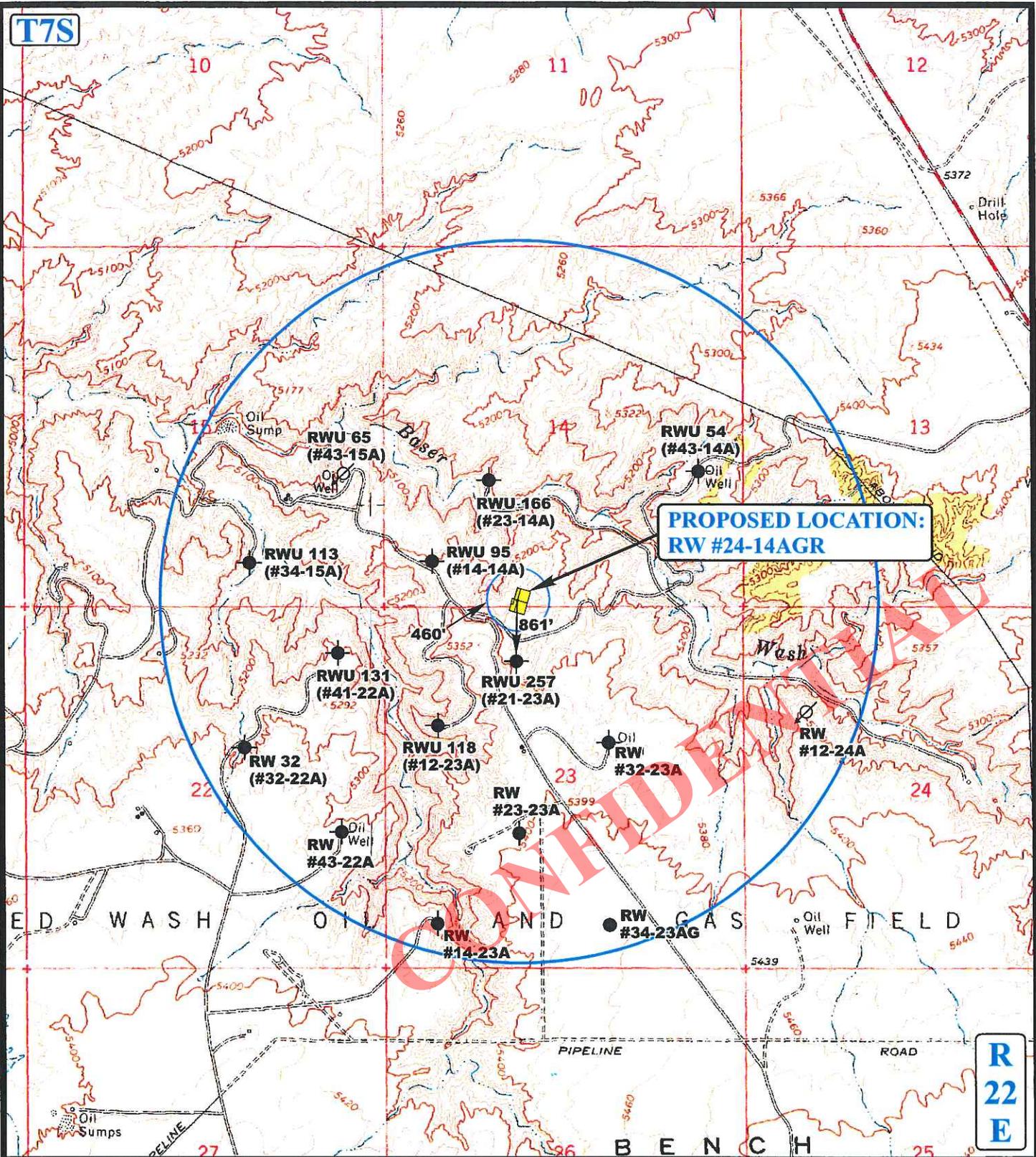
QEP ENERGY COMPANY

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 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP **06 07 12**
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: A.T. REVISED: 00-00-00

B
TOPO



**PROPOSED LOCATION:
RW #24-14AGR**

LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED



QEP ENERGY COMPANY

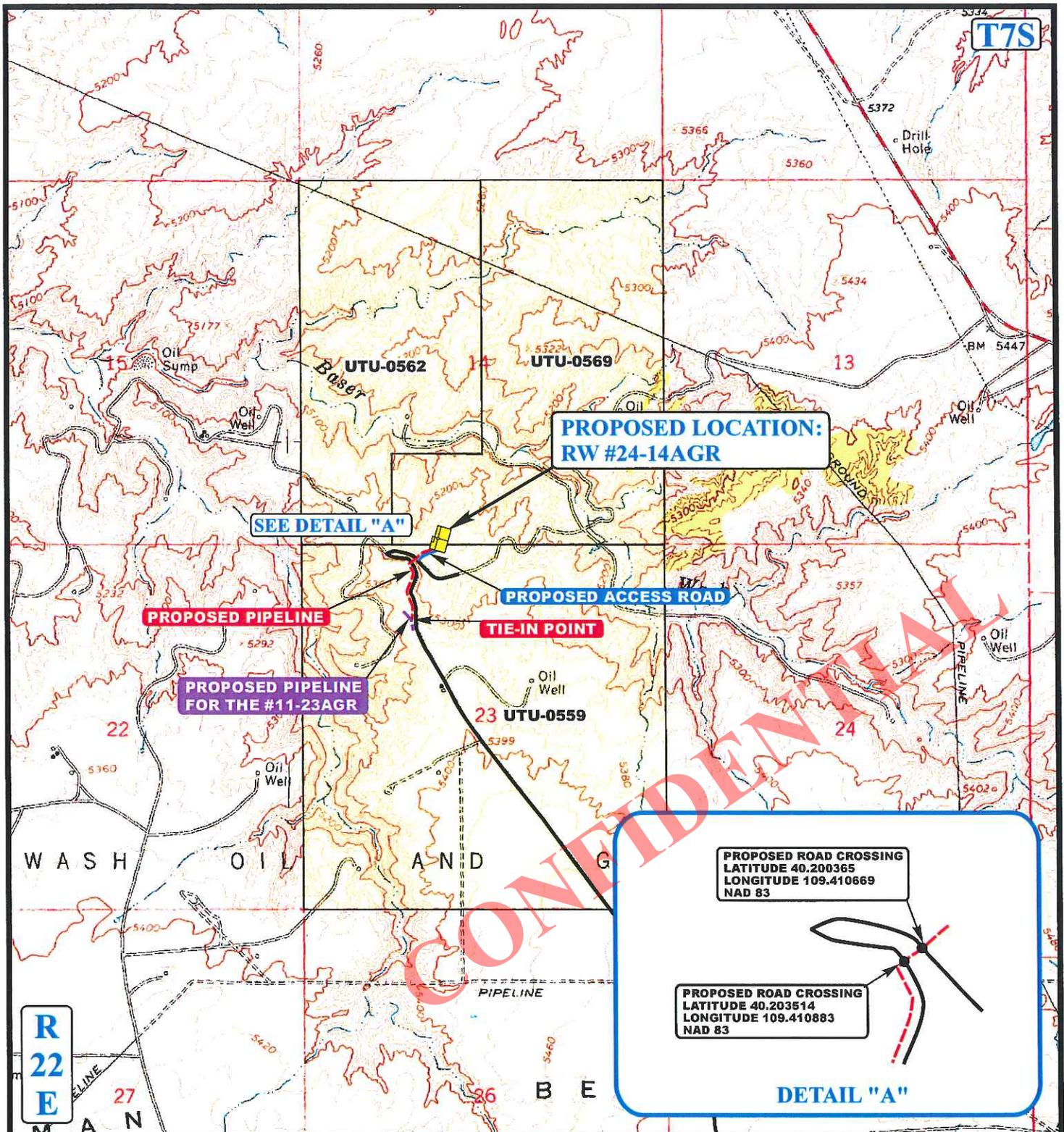
**RW #24-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
85' FSL 1983' FWL**



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
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TOPOGRAPHIC MAP
06 07 12
MONTH DAY YEAR
SCALE: 1" = 2000' DRAWN BY: A.T. REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE DISTANCE = 1,242' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- - - - PROPOSED PIPELINE
- - - - PROPOSED PIPELINE (SERVICING OTHER WELLS)

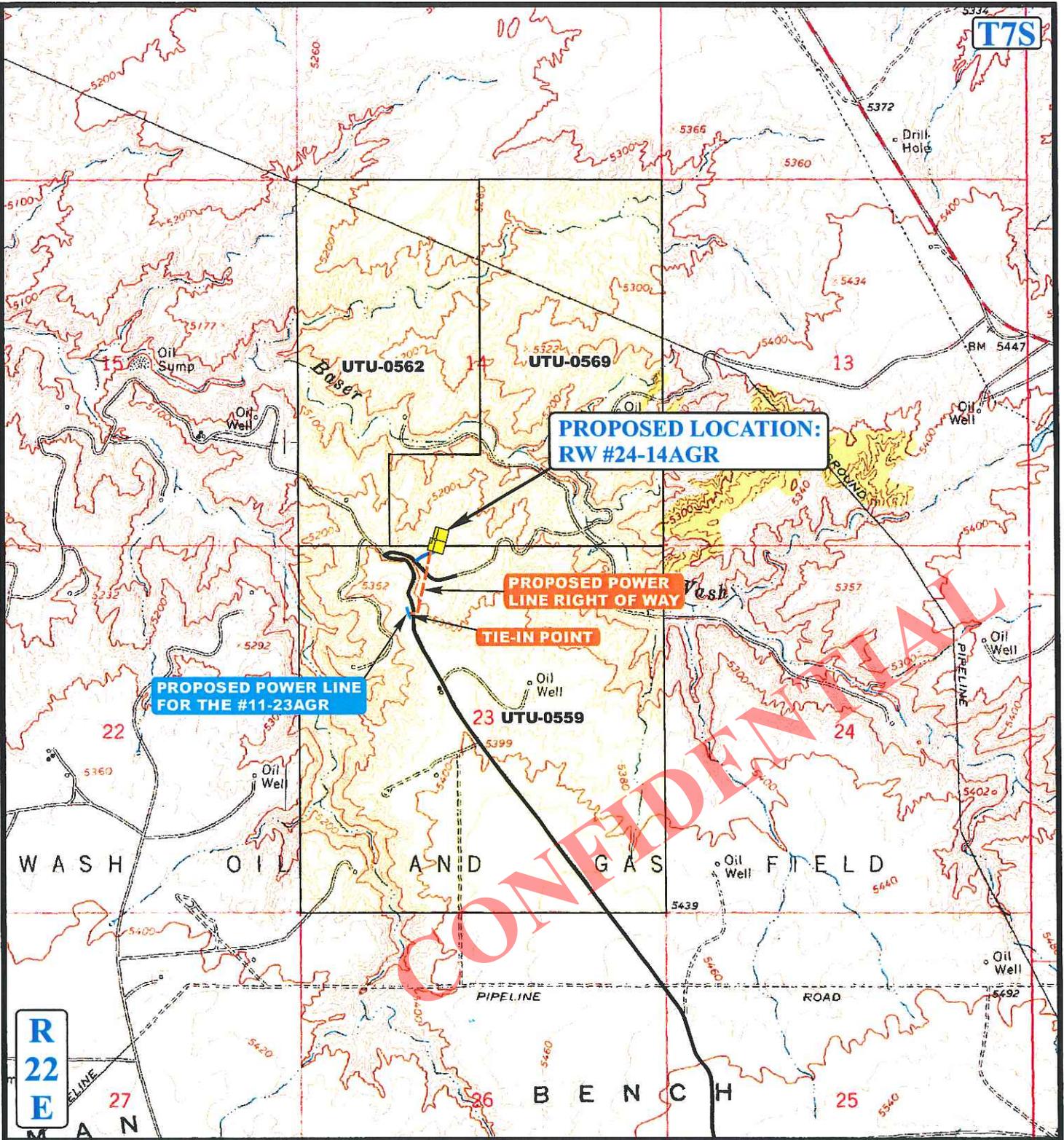
QEP ENERGY COMPANY

**RW #24-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
85' FSL 1983' FWL**

U E I S Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813



TOPOGRAPHIC MAP 06 07 12
MONTH DAY YEAR
SCALE: 1" = 2000' DRAWN BY: A.T. REVISED: 00-00-00 **D TOPO**



APPROXIMATE TOTAL POWER LINE DISTANCE = 1,017' +/-

LEGEND:

-  PROPOSED ACCESS ROAD
-  PROPOSED POWER LINE
-  PROPOSED POWER LINE (SERVICING OTHER WELLS)

QEP ENERGY COMPANY

RW #24-14AGR
 SECTION 14, T7S, R22E, S.L.B.&M.
 85' FSL 1983' FWL



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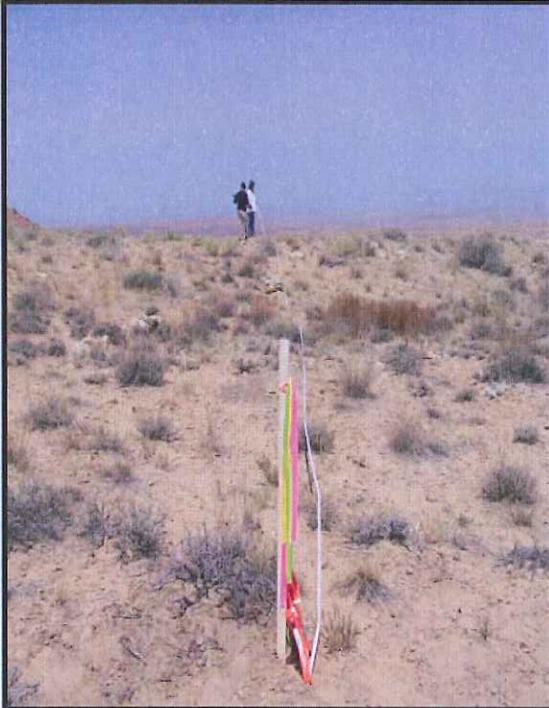


TOPOGRAPHIC MAP 06 07 12
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: A.T. REVISED: 00-00-00

1
 TOPO

QEP ENERGY COMPANY
REFERENCE MAP: AREA OF VEGETATION
RW #24-14AGR
 LOCATED IN UINTAH COUNTY, UTAH
 SECTION 14, T7S, R22E, S.L.B.&M.



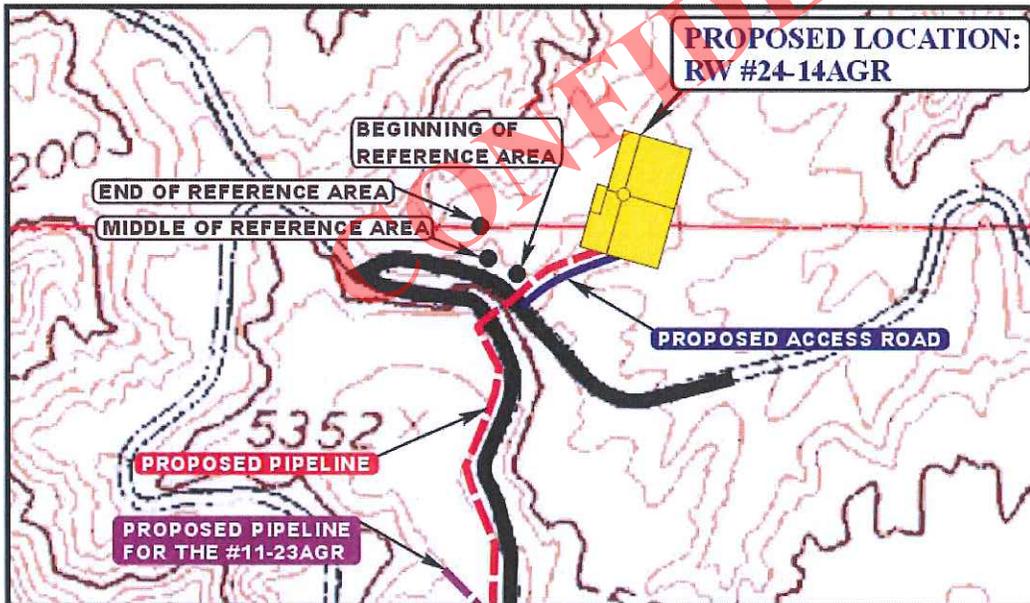
NOTE:

BEGINNING OF REFERENCE AREA
 NAD 83 Z12 UTM NORTHING: 14604938.496
 NAD 83 Z12 UTM EASTING: 2084195.758
 (NAD 83) LATITUDE: 40.203850
 (NAD 83) LONGITUDE: -109.410661

MIDDLE OF REFERENCE AREA
 NAD 83 Z12 UTM NORTHING: 14604981.492
 NAD 83 Z12 UTM EASTING: 2084110.415
 (NAD 83) LATITUDE: 40.203972
 (NAD 83) LONGITUDE: -109.410964

END OF REFERENCE AREA
 NAD 83 Z12 UTM NORTHING: 14605080.421
 NAD 83 Z12 UTM EASTING: 2084097.005
 (NAD 83) LATITUDE: 40.204244
 (NAD 83) LONGITUDE: -109.411006

PHOTO: VIEW FROM BEGINNING OF REFERENCE AREA



UELS Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

SCALE: 1" = 500'		07	11	12	REF.
		MONTH	DAY	YEAR	
TAKEN BY: J.C.	DRAWN BY: C.I.	REVISED: 00-00-00			

**QEP ENERGY COMPANY
RW 24-14AGR
SESW, SECTION 14, T7S, R22E
UINTAH COUNTY, UT
LEASE # UTU-0569**

MULTI-POINT SURFACE USE & OPERATIONS PLAN

An onsite inspection was conducted for the RW 24-14AGR on July 10, 2012. Weather conditions were hot at the time of the onsite. In attendance at the inspection were the following individuals:

Kevin Sadlier	Bureau of Land Management
Aaron Roe	Bureau of Land Management
Melissa Wardle	Bureau of Land Management
Ryan Angus	QEP Energy Company
Jan Nelson	QEP Energy Company
Valyn Davis	QEP Energy Company
Jeff Atwood	QEP Energy Company
Eric Wickersham	QEP Energy Company
Glen Beaman	QEP Energy Company
Dennis Paulson	QEP Energy Company
Merissa Davis	Bowen Collins & Associates
Greg Olsen	Uintah Engineering & Land Surveying

1. Existing Roads:

See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing roads.

The proposed well site is located approximately 29 miles south of Vernal, Utah.

-See attached TOPO Map "A".

Existing roads will be upgraded, maintained and repaired as necessary.

2. Planned Access Roads:

An offlease right-of-way is not required. The entire well pad and access road are located within the Red Wash Unit.

There will be a new access road approximately 288' in length, 30' in width, containing approximately 0.199 acres.

New access roads on BLM surface will be crowned (2 to 3%), ditched, and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet. Any additional disturbance required due to intersections or sharp curves will be discussed at the on-site and approved by the BLM.

Graveling or capping the roadbed will be performed as necessary to provide a well constructed safe road. Surface disturbance and vehicular traffic will be limited to the approved location and access route or, as proposed by the Operator.

The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards.

If culverts are needed, the location and size of the culverts will be proposed during the on-site. The operator will clean and maintain approved culverts as needed.

All drainage ditches and culverts will be kept clear and free-flowing and will be maintained according to original construction standards.

The access road disturbed area will be kept free of trash during operations. All traffic will be confined to the approved road running surface. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause excess siltation or accumulation of debris in the drainage nor shall the drainage be blocked by the roadbed.

Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, the holes shall be filled in and detours around the holes avoided.

When snow is removed from the road during the winter months, the snow should be pushed outside of the borrow ditches, and the turnouts kept clear so that snowmelt will be channeled away from the road.

Refer to Topo Map B for the location of the proposed access

3. Location of Existing Wells Within a 1-Mile Radius:

A map will be provided with the site-specific APD showing the location of existing wells within a one mile radius.

Please refer to Topo map C.

4. Location of Existing and Proposed Facilities:

The following guidelines will apply if the well is productive.

A containment dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks). These dikes will be constructed of compacted impervious subsoil; hold 110% of the capacity of the largest tank; and, be independent of the back cut. If a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required by the Environmental Protection Agency, the containment dike may be expanded to meet SPCC requirements with approval by the BLM/VFO AO. The specific APD will address additional capacity if such is needed due to environmental concerns. The use of topsoil for the construction of dikes will not be allowed.

All loading lines will be placed inside the berm surrounding the tank batteries.

All permanent (on site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a color approved by the BLM.

It was determined on the onsite by the BLM VFO/AO that the facilities will be painted Covert Green.

5. Power line

Electrification of the well sites will reduce the emissions and increase reliability by removing the gas venting of pumps for the heat trace system and chemical injection, as well as increase well pad safety by adding lights to the location.

Access into the proposed power lines will be from existing highways and roads. All construction and vehicular traffic will be confined to the authorized access corridor and designated county and/or BLM roads unless otherwise authorized and approved by the regulating agency

All work will be done in accordance with REA specifications.

QEP Energy Company is proposing a 50 ft temporary authorized access and a 15 ft permanent authorized access for power line maintenance. Minimal to no disturbance is required for the power lines following roads and existing ROW's.

The proposed power line will be 1017' in length, 15 ft in width, containing 0.350 acres.

6. Location and Type of Water Supply:

Fresh water will be obtained from Wonsits Valley water right # 49-251 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes.

7. Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

8. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids including salts and chemicals will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be used at the next drill site or will be removed and disposed of at an approved waste disposal facility within 6 months after drilling is terminated.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

Unless specified in the site specific APD, the reserve pit will be constructed on the location and will not be located within natural drainages, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

It was determined at the on-site inspection that a pit liner is necessary; the reserve pit will be lined with a synthetic reinforced liner, a minimum of 20 millimeters thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap will be disposed of in the pit.

Reserve pit leaks are considered an undesirable event and will be orally reported to the AO.

Disposal of Produced Water:

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with Onshore Order # 7, all produced water will be contained in tanks on location.

After the 90 day period, the produced water will be contained in tanks on location and then hauled by truck to the following pre-approved disposal site:

Red Wash Disposal well located in the SESE, Section 28, T7S, R23E,
West End Disposal located in the NESE, Section 28, T7S, R22E.

Produced water, oil, and other byproducts will not be applied to roads or well pads for control of dust or weeds. The dumping of produced fluids on roads, well sites, or other areas will not be allowed.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site. The spills will be reported to the AO and other authorities as appropriate.

A chemical porta-toilet will be furnished with the drilling rig. The chemical porta-toilet wastes will be hauled to Ashley Valley Sewer and Water System for disposal.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. Trash will not be burned on location. All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig. All trash and waste material will be hauled to the Uintah County Landfill.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of wells. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of wells within these areas. Specific APD's shall address any modifications from this policy.

9. Ancillary Facilities:

This will be an independent well location. Product will be contained in two 500 bbl tanks and then transported from location to delivery site.

A suitable muffler will be installed on pumping unit to help reduce noise control.

The pipeline will be steel, welded schedule #40 or greater, and consist of one (1) 3" inside diameter oil line and two (2) 1 1/4" inside diameter trace lines. The pipelines will be welded together on location and pulled separately into place. The lines will be banded together in one (1) bundle, insulated, and covered with tin painted Covert Green. The pipeline will be laid within 20 feet of existing roads, pipelines, or existing route authorizations as much as possible. Pipeline route alternatives will be discussed at the on-site and the resulting proposal will be described in the APD. Road crossings will have a casing installed over the pipeline and ramped so the pipeline will not be buried. Pipeline Route Authorizations will be 30' wide and the location noted on maps accompanying the APD.

FUEL GAS LINE: The pipeline will be a 2" inside diameter, poly pipe with a rating of 160 psi or greater. The line will be laid adjacent to the bundled line following the line to location.

The pipeline will be 1,242' in length, containing approximately 0.855 acres.

10. Well Site Layout:

A Location Layout Diagram describing drill pad cross-sections, cuts and fills, and locations of mud tanks, reserve pits, flare pit or flare box, pipe racks, trailer parking, spoil dirt stockpile(s), and the surface material stockpile(s) will be included with the site specific APD.

Please see the attached diagram rig orientation, parking areas, and access roads, as well as the location of the following:

The reserve pit.

The stockpiled topsoil will not be used for facility berms. All brush removed from the well pad during construction will be stockpiled with the topsoil.

The flare pit or flare box will be located downwind from the prevailing wind direction.

Any drainage that crosses the well location will be diverted around the location by using ditches, water diversion drains or berms. If deemed necessary at the on-site, erosion drains may be installed to contain sediments that could be produced from access roads and well locations.

11. Fencing Requirements:

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched using a stretching device before it is attached to corner posts.

The reserve pit will be fenced on three (3) sides during drilling operations. The fourth side will be put in place when the rig moves off location. The pit will be fenced and maintained until it is backfilled. If drilling operations does not commence within 3 days, the fourth side of the fence will be installed.

12. Reclamation Plan:

Reclamation will follow QEP Energy Company, Uinta Basin Division's Reclamation Plan, September 2009 (QEP Energy Plan) and the BLM Green River District Reclamation Guidelines.

All trash and debris will be removed from the disturbed area.

The disturbed area will be backfilled with subsoil.

Topsoil will be spread to an even, appropriate depth and disced if needed.

Water courses and drainages will be restored.

Erosion control devices will be installed where needed.

Seeding will be done in the fall, prior to ground freeze up.

Seed mix will be submitted to a BLM AO for approval prior to seeding.

Monitoring and reporting will be conducted as stated in QEP Energy Company's Reclamation Plan. Weed control will be conducted as stated in QEP Energy Company's Reclamation Plan.

A reference site and weed data sheet have been established and are included in this application.

Please see attached Weed Data Sheet.

Dry Hole/Abandoned Location:

On lands administered by the BLM abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions may include the reestablishment of irrigation systems; reestablishment of appropriate soil conditions; and, the reestablishment of vegetation as specified.

All disturbed surfaces will be recontoured to approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment.

At final abandonment, the Operator will cap the casing with a metal plate a minimum of 0.25 inch thick. The cap will be welded in place and the well location and identity will be permanently inscribed on the cap. The cap will be constructed with a weep hole. The depth of the permanent cap will be determined at the time of final abandonment. Long-term reclamation will then be applied and will follow the reclamation process described in this plan. When reclamation is deemed successful by the Operator and the BLM, the Operator will request a bond release.

13. Surface Ownership:

The well pad and access road are located on lands owned by:

Bureau of Land Management
170 South 500 East
Vernal, UT 84078

14. Other Information:

Drilling rigs and/or equipment used during drilling operations will not be stacked or stored on Federal lands or State administered lands after the conclusion of drilling operations or at any other time without authorization by the BLM Authorized Officer. If BLM authorization is obtained, such storage is only a temporary measure.

A Class III archeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted on September 5, 2012 **State of Utah Antiquities Report U-12-MQ-0621b** by Montgomery Archaeology Consultants. Cultural resource clearance has been recommended for this project.

A paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted on July 26, 2011, Report **No. IPC 12-97** by Stephen D. Sandau. The inspection resulted in the location of no fossil resources. However, if vertebrate fossil(s) are found during construction a paleontologist should be immediately notified. QEP will provide Paleo monitor if needed.

A habitat assessment and inventory was conducted in August 2012 by Bowen Collins & Associates. No horseshoe milkvetch populations or individuals were located during the surveys within the proposed RW 24-14AGR, 300' buffer zone or adjacent habitat. This proposed action would not impact any BLM sensitive species at this time.

Per the onsite meeting on July 10, 2012, the following items were requested/discussed.

There is 4" topsoil.

There is a Golden Eagle Stipulation from January 1 to August 31. No construction or drilling will commence during this period unless otherwise determined by a wildlife biologist that the site is inactive.

There is a Red Tailed Hawk Stipulation from March 15 to August 15. No construction or drilling will commence during this period unless otherwise determined by a wildlife biologist that the site is inactive.

Lessee's or Operator's Representative & Certification:

Jan Nelson
Permit Agent
QEP Energy Company
11002 East 17500 South
Vernal, UT 84078
(435) 781-4331

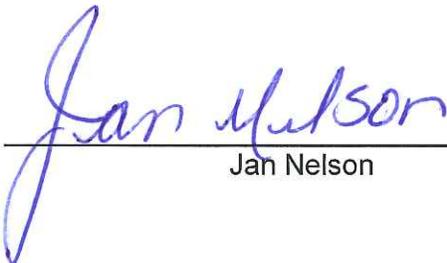
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

QEP Energy Company is considered to be the operator of the subject well. QEP Energy Company agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104.2 for lease activities is being provided by Bond No. ESB000024

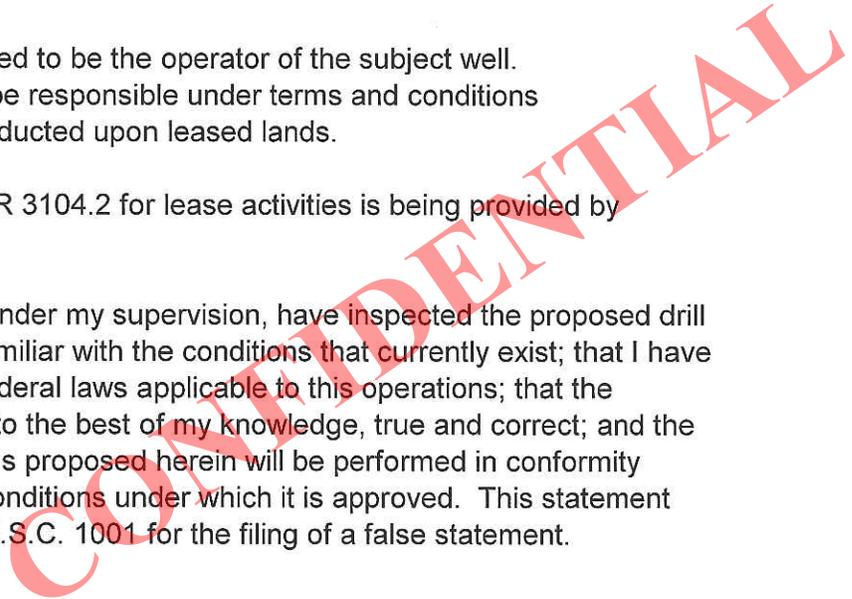
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operations; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

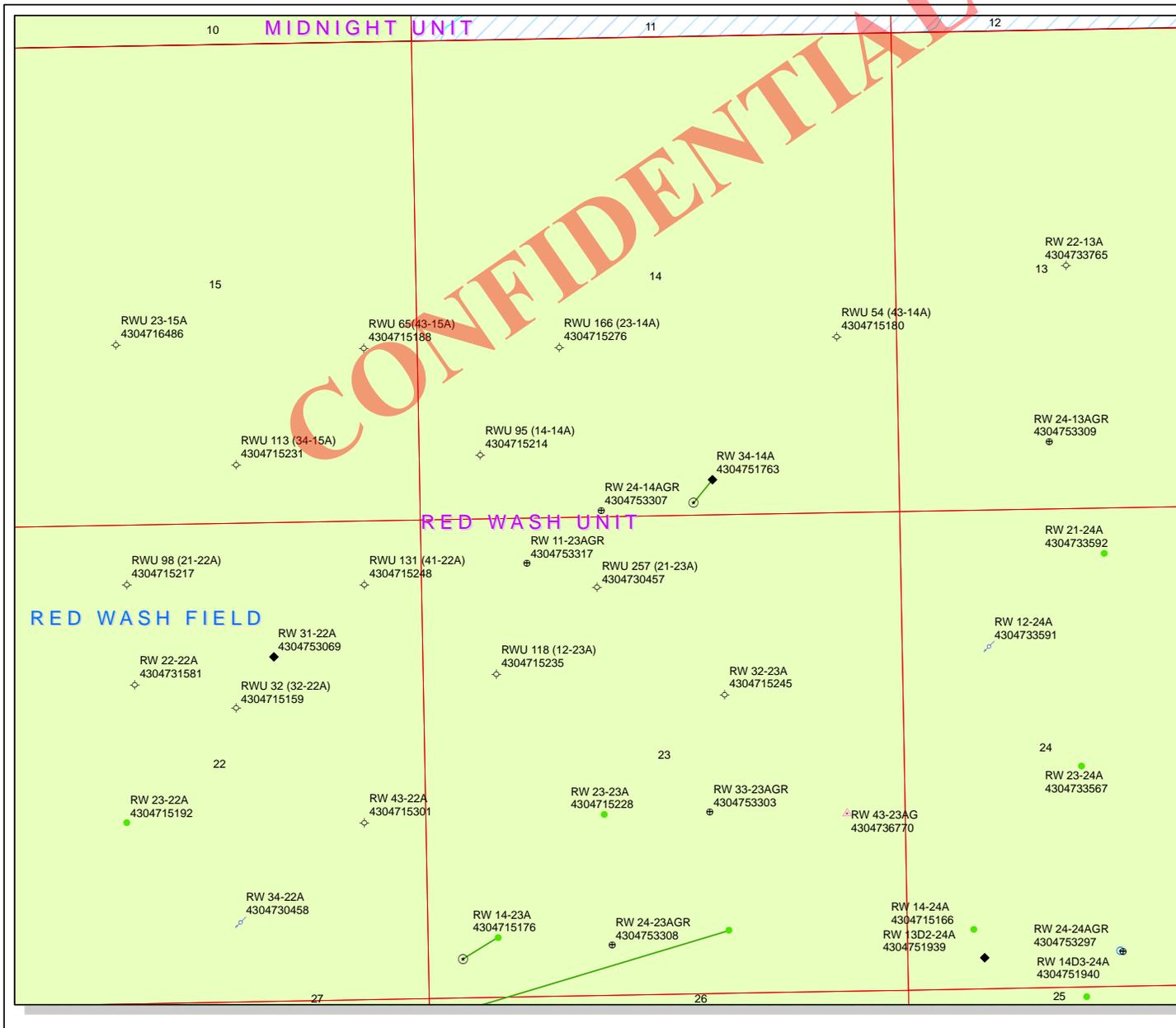


Jan Nelson

11/12/2012

Date

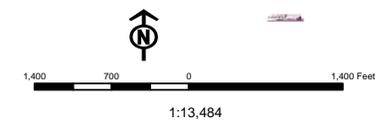




API Number: 4304753307
Well Name: RW 24-14AGR
Township T07.0S Range R22.0E Section 14
Meridian: SLBM
Operator: QEP ENERGY COMPANY

Map Prepared:
 Map Produced by Diana Mason

- | Units STATUS | Wells Query 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 STATUS | Fields STATUS |
| Unknown | TA - Temp. Abandoned |
| ABANDONED | TW - Test Well |
| ACTIVE | WDW - Water Disposal |
| COMBINED | WWW - Water Injection Well |
| INACTIVE | WSW - Water Supply Well |
| STORAGE | Bottom Hole Location - Oil/Gas/Dls |
| TERMINATED | |



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:**3160****(UT-922)**

November 14, 2012

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2012 Plan of Development Red Wash Unit,
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2012 within the Red Wash Unit, Uintah County, Utah.

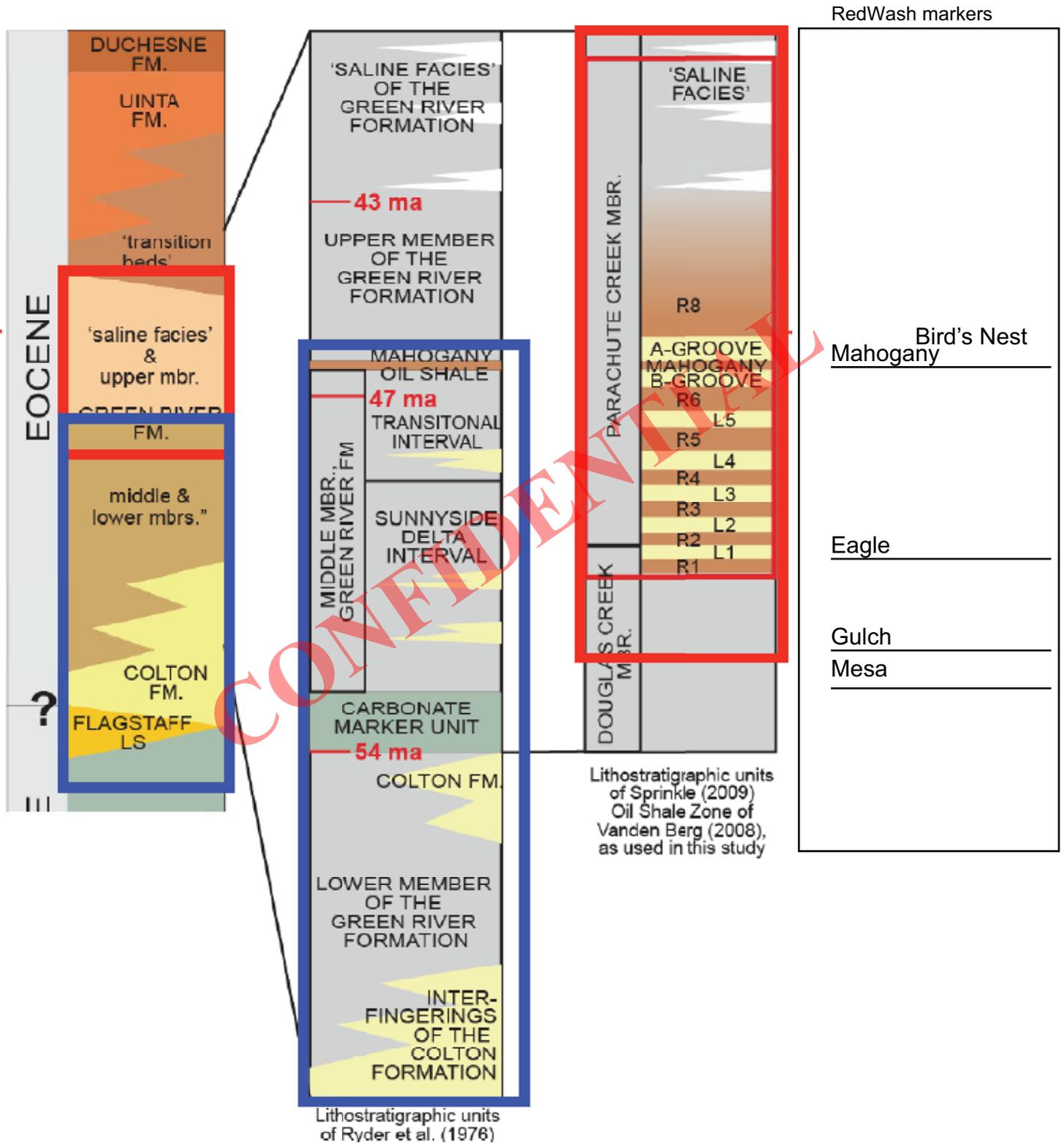
API#	WELL NAME	LOCATION
(Proposed PZ Green River)		
43-047-53297	RW 24-24AGR	Sec 24 T07S R22E 0385 FSL 2348 FWL
43-047-53299	RW 34-20BG	Sec 20 T07S R23E 0473 FSL 1856 FEL
43-047-53300	RW 22-17BGR	Sec 17 T07S R23E 2355 FNL 1761 FWL
43-047-53301	RW 24-29BGR	Sec 29 T07S R23E 0999 FSL 1928 FWL
43-047-53302	RW 11-26AGR	Sec 26 T07S R22E 0705 FNL 0476 FWL
43-047-53303	RW 33-23AGR	Sec 23 T07S R22E 2008 FSL 2169 FEL
43-047-53305	RW 31-31BGR	Sec 31 T07S R23E 0995 FNL 1879 FEL
43-047-53307	RW 24-14AGR	Sec 14 T07S R22E 0085 FSL 1983 FWL
43-047-53308	RW 24-23AGR	Sec 23 T07S R22E 0556 FSL 2010 FWL
43-047-53309	RW 24-13AGR	Sec 13 T07S R22E 0743 FSL 1653 FWL
43-047-53310	RW 13-17BGR	Sec 17 T07S R23E 1582 FSL 0677 FWL
43-047-53311	RW 11-27AGR	Sec 27 T07S R22E 0782 FNL 0716 FWL
43-047-53312	RW 44-24AGR	Sec 24 T07S R22E 0275 FSL 0180 FEL
43-047-53316	RW 42-18BGR	Sec 18 T07S R23E 2046 FNL 0998 FEL
43-047-53317	RW 11-23AGR	Sec 23 T07S R22E 0485 FNL 1155 FWL

This office has no objection to permitting the wells at this time.

bcc: File - Red Wash Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:11-14-12

RECEIVED: November 26, 2012



WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/12/2012

API NO. ASSIGNED: 43047533070000

WELL NAME: RW 24-14AGR

OPERATOR: QEP ENERGY COMPANY (N3700)

PHONE NUMBER: 435 781-4331

CONTACT: Jan Nelson

PROPOSED LOCATION: SESW 14 070S 220E

Permit Tech Review:

SURFACE: 0085 FSL 1983 FWL

Engineering Review:

BOTTOM: 0085 FSL 1983 FWL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.20442

LONGITUDE: -109.40953

UTM SURF EASTINGS: 635359.00

NORTHINGS: 4451659.00

FIELD NAME: RED WASH

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU0569

PROPOSED PRODUCING FORMATION(S): MAHOGANY BENCH

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: FEDERAL - ESB000024
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 49-251/49-2153
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingle Approved

LOCATION AND SITING:

- R649-2-3.
- Unit: RED WASH
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 187-07
- Effective Date: 9/18/2001
- Siting: Suspends General Siting
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason



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: RW 24-14AGR
API Well Number: 43047533070000
Lease Number: UTU0569
Surface Owner: FEDERAL
Approval Date: 11/26/2012

Issued to:

QEP ENERGY COMPANY, 11002 East 17500 South, Vernal, Ut 84078

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 187-07. The expected producing formation or pool is the MAHOGANY BENCH 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:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

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 at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at <http://oilgas.ogm.utah.gov>

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:

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

For John Rogers
Associate Director, Oil & Gas

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

NOV 12 2012

APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

CONFIDENTIAL

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU0569
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator QEP ENERGY COMPANY Contact: JAN NELSON E-Mail: jan.nelson@qepres.com		7. If Unit or CA Agreement, Name and No. 8920007610
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078	3b. Phone No. (include area code) Ph: 435-781-4331 Fx: 435-781-4395	8. Lease Name and Well No. RW 24-14AGR
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface SESW 85FSL 1983FWL 40.204456 N Lat, 109.409578 W Lon At proposed prod. zone SESW 85FSL 1983FWL 40.204456 N Lat, 109.409578 W Lon		9. API Well No. 43 047 53307
14. Distance in miles and direction from nearest town or post office* 29 MILES SOUTH OF VERNAL, UT		10. Field and Pool, or Exploratory PLEASANT VALLEY
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 85	16. No. of Acres in Lease 640.00	11. Sec., T., R., M., or Blk. and Survey or Area Sec 14 T7S R22E Mer SLB
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 861	19. Proposed Depth 6328 MD	12. County or Parish UINTAH
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5278 GL	22. Approximate date work will start 04/01/2013	13. State UT
23. Estimated duration 7 DAYS		17. Spacing Unit dedicated to this well 40.00
20. BLM/BIA Bond No. on file ESB000024		20. BLM/BIA Bond No. on file ESB000024
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) JAN NELSON Ph: 435-781-4331	Date 11/12/2012
Title PERMIT AGENT		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date OCT 23 2013
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Electronic Submission #160034 verified by the BLM Well Information System
For QEP ENERGY COMPANY, sent to the Vernal
Committed to AFMSS for processing by JOHNETTA MAGEE on 11/28/2012 (13JM0124AE)

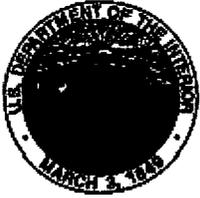
RECEIVED

OCT 28 2013

NOTICE OF APPROVAL

UDOGM DIV. OF OIL, GAS & MINING

** BLM REVISED **



**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE**

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: QEP ENERGY COMPANY
Well No: RW 24-14AGR
API No: 43-047-53307

Location: SESW, Sec. 14, T7S, R22E
Lease No: UTU-0569
Agreement:

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- QEP Energy Company's proposal to 19 oil wells: RW 11-27 AGR, RW 12-14 AGR, RW 12-25 AGR, RW 12-26 AGR, RW 13-17 BGR, RW 13-26 AGR, RW 14-25 AGR, RW 23-19 BGR, RW 24-13 AGR, RW 24-14 AGR, RW 24-25 AGR, RW 31-20 BGR, RW 31-24 AGR, RW 34-25 AGR, RW 42-25 AGR, RW 43-20 BGR, RW 43-27 AGR, RW 44-25 AGR, RW 44-29 BGR. Sections 13, 14, 23, 24, 25, 26, and 27, T. 7 S., R. 22 E., and Sections 17, 19, 20, 28, 29, T. 7 S., R. 23 E, Uintah County, Utah. The project area is located approximately 25 miles south of Vernal, Utah.
- The construction of the wells and access roads will result in approximately 75.56 acres of new surface disturbance.
- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.
- All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NO_x per horsepower-hour.
- Green completions would be used for all well completion activities where technically feasible.
- Employ enhanced VOC emission controls with 95% control efficiency on production equipment having a potential to emit greater than 5 tons per year.
- The reserve pit will be fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished. The reserve pits for the wells will be lined with a 16 ml liner with felt.
- A dike will be constructed around those production facilities that contain fluids. The dikes will be constructed of compacted subsoil. They will be impervious, hold 10 percent more than the capacity of the largest tank, and be independent of the back cut.
- All permanent (meaning on site for six months or longer) structures will be painted Covert Green to match the surrounding landscape color unless otherwise authorized. This will include all facilities except those required to comply with Occupational Safety and Health Act (OSHA) regulations.
- If dry, the wells will be plugged and abandoned as per BLM and State of Utah requirements.

- Prior to construction, an invasive plants/noxious weeds inventory will be completed for all areas where surface disturbance will occur. A completed Weed Inventory form documenting any occurrences of invasive plants or noxious weeds will be submitted to the BLM Authorized Officer before surface disturbance will occur.
- All vehicles and equipment would be cleaned either through power-washing, or other approved method, if the vehicles or equipment are brought in from areas outside the Uinta Basin, to prevent weed seed introduction.
- The operator will control noxious/invasive weeds along their roads, pipelines, well sites, or other applicable facilities by the application of herbicides or by mechanical removal until reclamation is considered to be successful by the authorized officer (AO) and the bond for the well is released. A list of noxious weeds will be obtained from the BLM or the appropriate county extension office. On BLM-administered land, the operator will submit a Pesticide Use Proposal and obtain approval prior to the application of herbicides, other pesticides, or possible hazardous chemicals.
- Immediately upon well completion, the location and surrounding area shall be cleared of all unused tubing, equipment, debris, materials, and trash. Any hydrocarbons in the pit will be removed in accordance with 43 CFR 3162.7-1.
- The reserve pit and the portion of the well not needed for production facilities/operations shall be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion, or as soon as environmental conditions allow. The stockpiled pit topsoil will then be spread over the pit area and broadcast-seeded/drill seeded (preferred method) with a seed mix submitted to the BLM Authorized Officer (AO) for approval prior to seeding. Seeding will be done in the fall prior to winter freezing of the soil. The seed mixture shall be worked into the topsoil with a drill seeder, bulldozer or other heavy equipment. If initial seeding is not successful, reseeding may be required.
- Once the well is plugged and facilities are removed and abandoned, the topsoil shall be stripped and stockpiled off of the location, and the well site, pipelines, and access roads will be returned to natural contours. The topsoil shall be respread, and the location seeded with the mixture submitted to the BLM AO. The seed mixture shall be worked into the topsoil with a drill seeder, bulldozer or other heavy equipment.
- Interim reclamation, final reclamation, and monitoring of reclaimed areas will be completed in accordance with the QEP Energy Company, Uinta Basin Division's Reclamation Plan, September 2009 on file with the Vernal Field Office of the BLM.
- Prior to any surface disturbance, vegetative monitoring locations and reference sites will be identified by QEP and approved by the BLM AO. Vegetation monitoring protocol will be developed by QEP and approved by the BLM AO prior to implementation of revegetation techniques and will be designed to monitor % basal vegetative cover.
- Revegetated areas will be inspected annually and monitored to document location and extent of areas with successful revegetation, and areas needing further reclamation (for a period of 5 years after construction completion). A reclamation report will be submitted to the AO by March 31 of each year.
- QEP has agreed not to construct or drill during the following dates, unless otherwise determined by the BLM Authorized Officer.

Raptor nesting timing restriction

Well Name	Burrowing Owl March 1 to August 31	Red Tailed Hawk March 1 to August 15	Great Horned Owl December 1 to September 31	Ferruginous Hawk March 1 to August 31	Golden Eagle January 1 to August 31
RW 11-27 AGR	Yes	No	No	No	No
RW 12-14 AGR	No	Yes	Yes	No	No
RW 12-25 AGR	Yes	No	No	No	No
RW 12-26 AGR	No	No	No	Yes	No
RW 13-17 BGR	No	No	No	No	No
RW 13-26 AGR	No	No	No	Yes	No
RW 14-25 AGR	No	No	No	No	No
RW 23-19 BGR	No	No	No	No	No
RW 24-13 AGR	No	Yes	No	No	No
RW 24-14 AGR	No	Yes	No	No	Yes
RW 24-25 AGR	Yes	No	No	No	No
RW 31-20 BGR	Yes	No	No	No	No
RW 31-24 AGR	No	No	No	No	No
RW 34-25 AGR	Yes	No	No	No	No
RW 42-25 AGR	No	No	No	No	No
RW 43-20 BGR	No	No	No	No	No
RW 43-27 AGR	Yes	No	No	Yes	No
RW 44-25 AGR	Yes	No	No	No	No
RW 44-29 BGR	No	No	No	Yes	No

Yes indicates that drilling or construction would not commence during this time period unless approved by the BLM authorized officer.

- QEP will educate its contractors and employees about the relevant federal regulations intended to protect paleontological and cultural resources. All vehicular traffic, personnel movement, construction, and restoration activities shall be confined to areas cleared by the site inventory and

to existing roads. If any potential paleontological or cultural resources are uncovered during construction, work will stop immediately in the area and the appropriate BLM AO will be notified.

- A paleontological survey was conducted on all areas where surface disturbance would occur Table 2-2 indicates where and when a paleontologist would be required to monitor surface disturbing activity.

Table 2-2 Paleontological Resources Survey Results.

Well Name	BLM Authorized Permitted Paleontologist Would Monitor the Access Road.	BLM Authorized Permitted Paleontologist Would Monitor the Pipe Line.	BLM Authorized Permitted Paleontologist Would Monitor the Well Pad.	BLM Authorized Permitted Paleontologist Would Monitor for the Power Line.
RW 11-27 AGR	No	No	No	NA
RW 12-14 AGR	Yes	Yes	Yes	NA
RW 12-25 AGR	No	No	No	No
RW 12-26 AGR	No	No	No	No
RW 13-17 BGR	Yes	Yes	Yes	Yes
RW 13-26 AGR	No	No	No	No
RW 14-25 AGR	No	No	No	No
RW 23-19 BGR	No	No	No	No
RW 24-13 AGR	No	Yes	No	No
RW 24-14 AGR	No	No	No	No
RW 24-25 AGR	No	No	No	No
RW 31-20 BGR	No	No	No	No
RW 31-24 AGR	No	No	No	No
RW 34-25 AGR	No	No	No	No
RW 42-25 AGR	No	No	No	No
RW 43-20 BGR	No	No	No	No
RW 43-27 AGR	No	No	No	No
RW 44-25 AGR	Yes	Yes	Yes	Yes
RW 44-29 BGR	No	No	No	No

Yes indicates that QEP would provide a BLM Authorized Permitted Paleontologist to monitor the construction process for the access road, pipe line, well pad, or power line.

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE COAs:

- Cement for the production casing shall be brought up to a minimum of 200` feet above the surface casing shoe.
- A CBL shall be run from TD to TOC in the Production Casing.
- Variance shall be granted as requested in Section 6 of the Drilling Program.
- Gamma Ray Log shall be run from Total Depth to the Surface.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

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: UTU0569
1. TYPE OF WELL Oil Well	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: QEP ENERGY COMPANY	7. UNIT or CA AGREEMENT NAME: RED WASH
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078	8. WELL NAME and NUMBER: RW 24-14AGR
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0085 FSL 1983 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 14 Township: 07.0S Range: 22.0E Meridian: S	9. API NUMBER: 43047533070000
9. FIELD and POOL or WILDCAT: RED WASH	COUNTY: UINTAH
9. 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: 11/26/2014	<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 checked="" 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.
QEP ENERGY COMPANY HEREBY REQUESTS A ONE YEAR EXTENSION FOR THE APD ON THE ABOVE CAPTIONED WELL.

NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 11/26/2013	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047533070000

API: 43047533070000

Well Name: RW 24-14AGR

Location: 0085 FSL 1983 FWL QTR SESW SEC 14 TWNP 070S RNG 220E MER S

Company Permit Issued to: QEP ENERGY COMPANY

Date Original Permit Issued: 11/26/2012

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No

- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No

- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No

- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No

- Has the approved source of water for drilling changed? Yes No

- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No

- Is bonding still in place, which covers this proposed well? Yes No

Signature: Valyn Davis

Date: 11/26/2013

Title: Regulatory Affairs Analyst Representing: QEP ENERGY COMPANY

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5. LEASE DESIGNATION AND SERIAL NUMBER: UTU0569
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: 7. UNIT or CA AGREEMENT NAME: RED WASH
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: RW 24-14AGR
2. NAME OF OPERATOR: QEP ENERGY COMPANY	9. API NUMBER: 43047533070000
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078	PHONE NUMBER: 303 308-3068 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0085 FSL 1983 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 14 Township: 07.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: RED WASH COUNTY: UINTAH 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: 2/1/2014 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

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

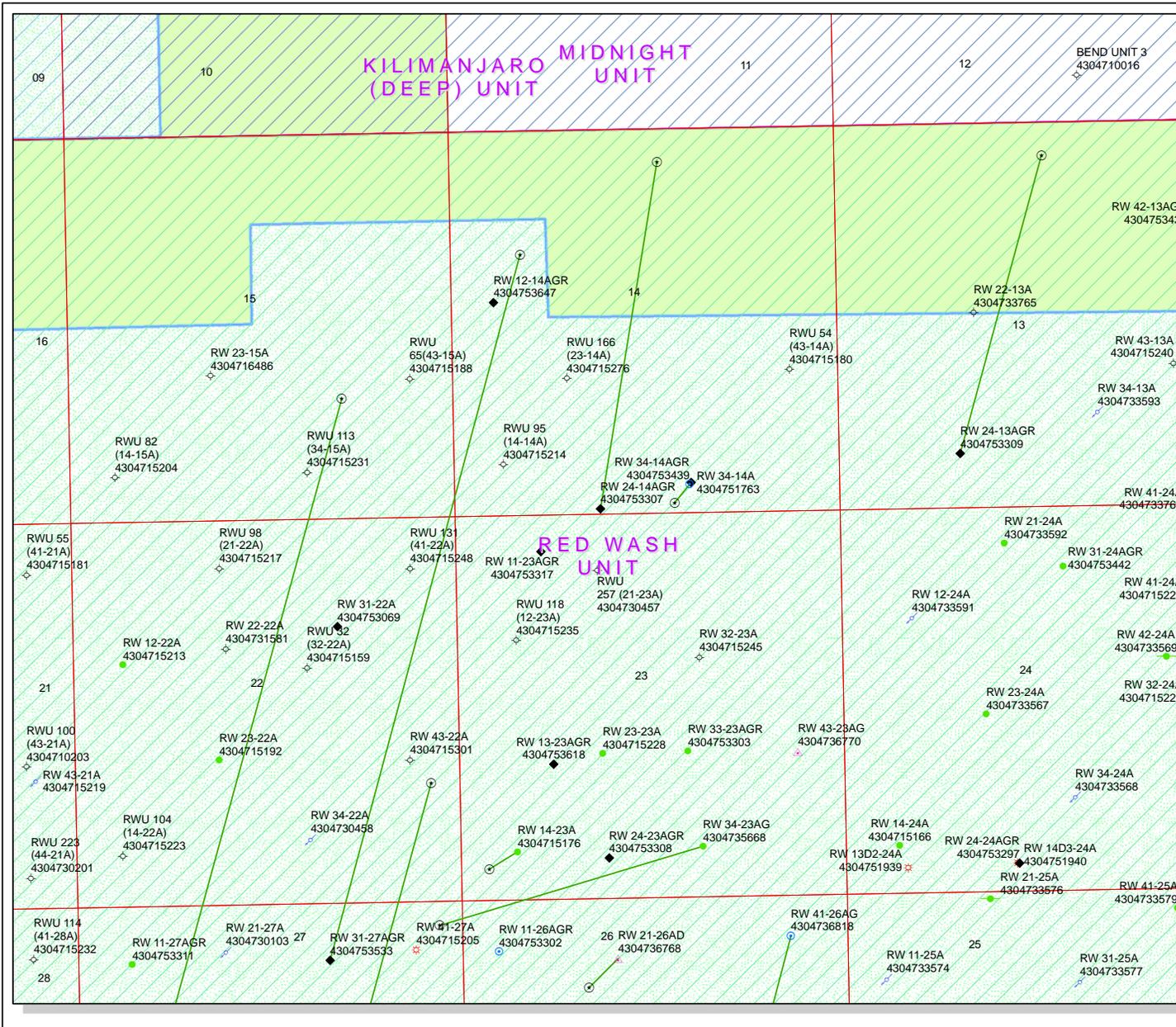
QEP ENERGY COMPANY REQUESTS TO CHANGE THE RW 24-14AGR FROM A VERTICAL OIL WELL TO A HORIZONTAL GAS WELL. NEW BOTTOM HOLE FOOTAGES ARE: 460' FNL, 2425' FEL. NWNE, SEC. 14, T7S, R22E. LAT: 40.217450, LONG: 109.406458. TD WILL CHANGE FROM 6,328' MD TO 16,446' MD. NO ADDITIONAL SURFACE DISTURBANCE IS REQUIRED FOR THIS ACTION. QEP ENERGY COMPANY REQUESTS THIS WELL BE FILED AS "CONFIDENTIAL". PLEASE SEE ATTACHED: LEGAL PLAT, DRILL PLANS, DIRECTIONAL PLAN

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

Date: February 12, 2014

By:

NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 1/30/2014	



API Number: 4304753307

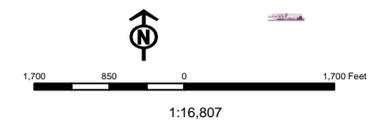
Well Name: RW 24-14AGR

Township: T07.0S Range: R22.0E Section: 14 Meridian: S

Operator: QEP ENERGY COMPANY

Map Prepared: 2/6/2014
Map Produced by Diana Mason

Wells Query		Units STATUS	
●	APD - Approved Permit	□	ACTIVE
○	DRL - Spudded (Drilling Commenced)	□	EXPLORATORY
⚡	GIW - Gas Injection	□	GAS STORAGE
⚡	GS - Gas Storage	□	NF PP OIL
⊕	LOC - New Location	□	NF SECONDARY
⊖	OPS - Operation Suspended	□	PI OIL
⊖	PA - Plugged Abandoned	□	PP GAS
⊖	PGW - Producing Gas Well	□	PP GEOTHERML
⊖	POW - Producing Oil Well	□	PP OIL
⊖	SGW - Shut-in Gas Well	□	SECONDARY
⊖	SOW - Shut-in Oil Well	□	TERMINATED
⊖	TA - Temp. Abandoned	□	
○	TW - Test Well	□	
⊖	WOW - Water Disposal	□	
⊖	WW - Water Injection Well	□	
●	WSW - Water Supply Well	□	
		Fields STATUS	
○		□	Unknown
○		□	ABANDONED
○		□	ACTIVE
○		□	COMBINED
○		□	INACTIVE
○		□	STORAGE
○		□	TERMINATED



QEP Energy Company
RW 24-14AGR
Summarized New Drill Lower Mesa Verde Horizontal
Procedure

1. MIRU drilling rig.
2. Drill 12-1/4" hole to 3,973'.
3. RIH with 9-5/8" 40# N-80 casing to bottom.
4. Cement casing.
5. NU rig's 5,000 WP rated BOP.
6. Drill vertically to 11,175'.
7. TOOH and PU curve assembly.
8. TIH.
9. Build curve per directional plan to land in the Lower Mesa Verde.
10. LDDP.
11. RIH with 7" 29# P-110HC to 12,045'.
12. Cement casing.
13. PU 4" DP and lateral assembly.
14. Drill out cement.
15. Drill ~4,402' of lateral at ~358.29° azimuth, following formation dip.
 - a. Mud system to be Oil Based. Weights are expected to be in the 10.0 – 11.0 ppg range.
16. PU 4 1/2" 15.1# P-110HC CDC casing and run to 50' off bottom of the TD of 16,446'.
17. Cement casing.
18. ND BOP's.
19. RDMOL.

ONSHORE OIL & GAS ORDER NO. 1
 QEP ENERGY COMPANY
 RW 24-14AGR

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated top of important geologic markers are as follows:

*This is a horizontal well:

<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Green River	3,042'	3,046'
Bird's Nest	3,378'	3,382'
Mahogany	3,919'	3,923'
Base of Mod Saline	5,199'	5,203'
Wasatch	6,582'	6,586'
Mesaverde	9,565'	9,569'
Kick Off Point	11,170'	11,175'
TD	11,973'	16,446'

2. Anticipated Depths of Oil, Gas, Water, and Other Mineral Bearing Zones

The estimated depths at which the tops of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>
Oil/Gas	Green River	3,042'	3,046'
Oil/Gas	Wasatch	6,582'	6,586'
Oil/Gas	Mesaverde	9,565'	9,569'

ONSHORE OIL & GAS ORDER NO. 1
QEP ENERGY COMPANY
RW 24-14AGR

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right 49-251 (which was filed on May 7, 1964) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at LaPoint Recycling and Storage in Section 12, T5S R19E of Uintah County, UT or Red Wash Disposal site; SESE, Section 28, T7S, R23E or West End Disposal Site; NESE, Section 28, T7S, R22E.

3. Operator's Specification for Pressure Control Equipment

- A. An 11" 5000 psi double ram with blind rams and pipe rams annular preventer and drilling spool or BOP with 2 side outlets.
- B. All BOP connections subject to pressure shall be flanged, welded or clamped.
- C. Kill line (2" min), 2 choke line valves (3" min), choke line (3" min), 2 kill line valves (2" min) and a check valve, 2 chokes with one remotely controlled from rig floor and a pressure gauge on choke manifold.
- D. Upper and Lower Kelly cock valves with handles and safety valve and subs to fit all drill string connections.
- E. IBOP or float sub available.
- F. Fill up line must be installed above the uppermost preventer.
- G. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 5M system and individual components shall be operable as designed.

ONSHORE OIL & GAS ORDER NO. 1
QEP ENERGY COMPANY
RW 24-14AGR

4. **Casing Program**

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, lb/ft	Grade	Thread	Condition	MW
17-1/2 "	14"	sfc	80'	Steel	Cond.	None	Used	Air
12 1/4"	9 5/8"	sfc	3,973'	40.0	N-80	LTC	New	8.8-9.3ppg
8 3/4"	7"	sfc	12,045'	29.0	P-110HC	LTC	New	9-10.5 ppg
6 1/8"	4 1/2"	sfc	16,396'	15.1	P-110HC	CDC	New	10-11.0 ppg

The lateral will be lined with casing 50' off bottom and cemented to surface.

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9 5/8"	40.0 lb.	N-80	LTC	3,090 psi	5,750 psi	727,000 lb.
7"	29.0 lb.	P-110HC	LTC	9,750 psi	11,220 psi	797,000 lb.
4 1/2"	15.1 lb.	P-110HC	CDC	15,130 psi	14,420 psi	485,000 lb.

Please refer to the attached wellbore diagram for further details.

5. **Cementing Program**

14" Conductor:

Cement to surface with construction cement.

9-5/8" Surface Casing: SFC – 3,973' (MD)

Lead Slurry: Surface (TOC) – 3,473'. 611 sks (1,905 ft³) Halliburton Extendacem, 1 pps Granulite TR 1/4, 0.125 pps Poly-E-Flake, Slurry Weight 11.0 ppg, 3.12 ft³/sk, 75% XS in open hole only.

Tail Slurry: 3,473' – 3,973'. 198 sx (291ft³) Halliburton Econocem, 0.2% HR-5 Retarder, 1.0 pps Granulite TR 1/4, 0.125 pps Poly-E-Flake, Slurry Weight 13.5 ppg, 1.47 ft³/sk, 75% XS in open hole.

7" Intermediate Casing: sfc – 12,045' (MD)

Lead: Sfc – 9,068'. 605 sks (1,779 cu ft) Halliburton ECONOCEM V4+ 3 LBM/SK Kol-Seal (LCM) + 0.1% HR-800 (Retarder). Slurry Weight 11 lb/gal, Slurry Yield 2.94 ft³/sk, with 50% Excess

Tail Slurry: 9,068' – 12,045'. 456 sks (680 cu ft) Halliburton EXPANDACEM V3 + 0.2% HR-800 (Retarder) + 0.125 lbm/sk Poly-E-Flake (LCM) + 1 lbm/sk Granulite TR 1/4 (LCm). Slurry wt: 13.5 ppg, Slurry yield: 1.49 ft³/sk, with 50% excess.

ONSHORE OIL & GAS ORDER NO. 1
QEP ENERGY COMPANY
RW 24-14AGR

4-1/2" Production Casing: sfc – 16,396' (MD)

Lead: Sfc – 9,068'. 365 sks (890 cu ft) Halliburton ECONOCEM V4+ 3 LBM/SK Kol-Seal (LCM) + 0.1% HR-800 (Retarder). Slurry Weight 11.5 lb/gal, Slurry Yield 2.44 ft³/sk.

Tail Slurry: 9,068' – 16,396'. 566 sks (849 cu ft) Halliburton EXPANDACEM V3 + 0.6% HR-800 (Retarder) + 0.125 lbm/sk Poly-E-Flake (LCM) + 1 lbm/sk Granulite TR ¼ (LCm). Slurry wt: 13.5 ppg, Slurry yield: 1.50 ft³/sk, with 35% excess.

6. Auxilliary Equipment

- A. Kelly Cock – yes
- B. Float at the bit – Yes
- C. Monitoring equipment on the mud system – PVT/Flow Show
- D. Full opening safety valve on the rig floor – Yes
- E. Rotating Head – Yes
- F. Drilling below 14" Conductor will be done with water. Drilling below the 9-5/8" casing will be done with water based mud. Drilling below the 7" will be done with Oil Based Mud. Maximum anticipated mud weight is 11.0 ppg.
- G. No minimum quantity of weight material will be required to be kept on location.
- H. Gas detector will be used from surface casing depth to TD.

7. Testing, Logging, and Coring Program

- a. Cores – None Anticipated
- b. DST – None Anticipated
- c. Logging:
 - i. Mud logging from surface casing point to TD
 - ii. OH Logs: GR-SP-Induction, Neutron Density to be run in the intermediate section to KOP.
 - iii. MWD-GR will be utilized during drilling operations to aid in landing the curve and maintaining the laterals within the desired zone.
- d. Formation and completion interval: Lower Mesa Verde. Stimulation: stimulation will be designed for the particular area of interest encountered.

ONSHORE OIL & GAS ORDER NO. 1
QEP ENERGY COMPANY
RW 24-14AGR

8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated.

Maximum anticipated bottom hole pressure (approx, psi): 6,849

Maximum anticipated bottom hole temperature (approx, deg F): 215

H2S has not been encountered in other wells drilled to similar depths in the general area.

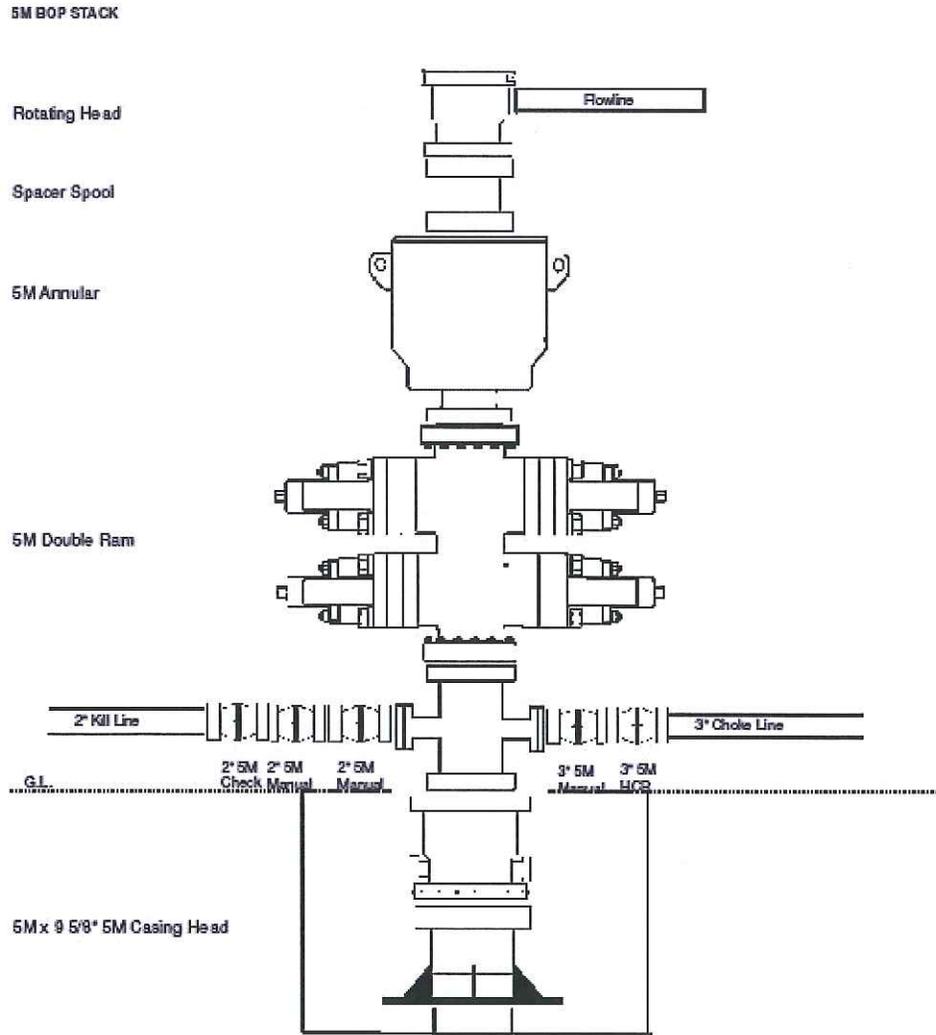
9. Additional Information For Oil Base Mud

- A. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 0.030" (0.75 mm +/-) thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.
- B. Oil-base mud will be mixed in the closed circulating system and transferred to one or more 400 bbl or 500 bbl tanks (as available) on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be transferred to the cuttings pit nearest the shakers and stored in this cuttings pit for solidification after the rig is released and moved off location.
- C. The means to transport the cuttings from the solids control equipment to the OBM cuttings pit will be dictated by the size of the location:
- a. Option 1: By track-hoe or similar equipment from a cuttings bin to the cuttings pit.
 - b. Option 2: By 10" PVC pipe or equivalent steel piping. Water will be pumped to the solids control equipment and will convey the OBM cuttings from the solids control equipment to the OBM cuttings pit via the PVC pipe. The water will be recycled multiple times from the cuttings pit to continue to transport the cuttings to the cuttings pit. The conveyance system will be enclosed on the solids control end to prevent spills. The conveyance piping system at the cuttings pit end will be placed on top of pit liner to eliminate absorption of fluids into the soil.

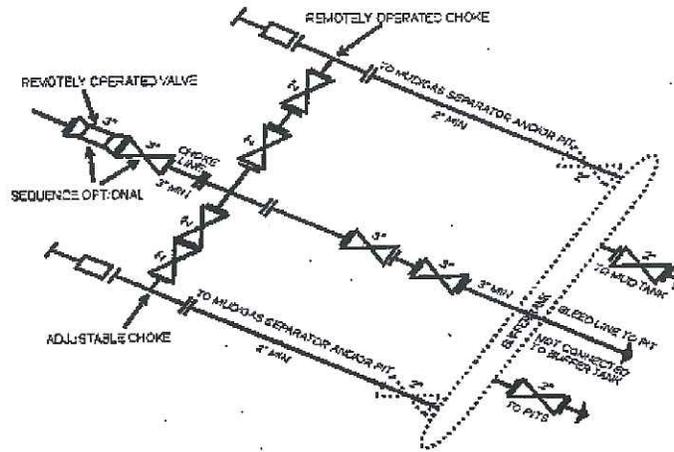
ONSHORE OIL & GAS ORDER NO. 1
QEP ENERGY COMPANY
RW 24-14AGR

- D. Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings pit.
- E. All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.
- F. Once all waste has been placed in the cuttings pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings pit and will be returned to the existing grade bordering the pit.

ONSHORE OIL & GAS ORDER NO. 1
QEP ENERGY COMPANY
RW 24-14AGR



ONSHORE OIL & GAS ORDER NO. 1
QEP ENERGY COMPANY
RW 24-14AGR



5M CHOKES MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolded the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 264, 384, 1086, OX 1534 drawings, it would also be applicable to those situations.

[54 FR 39528, Sept. 27, 1989]

RW 24-14AGR

Updated 01-06-2014 SHK

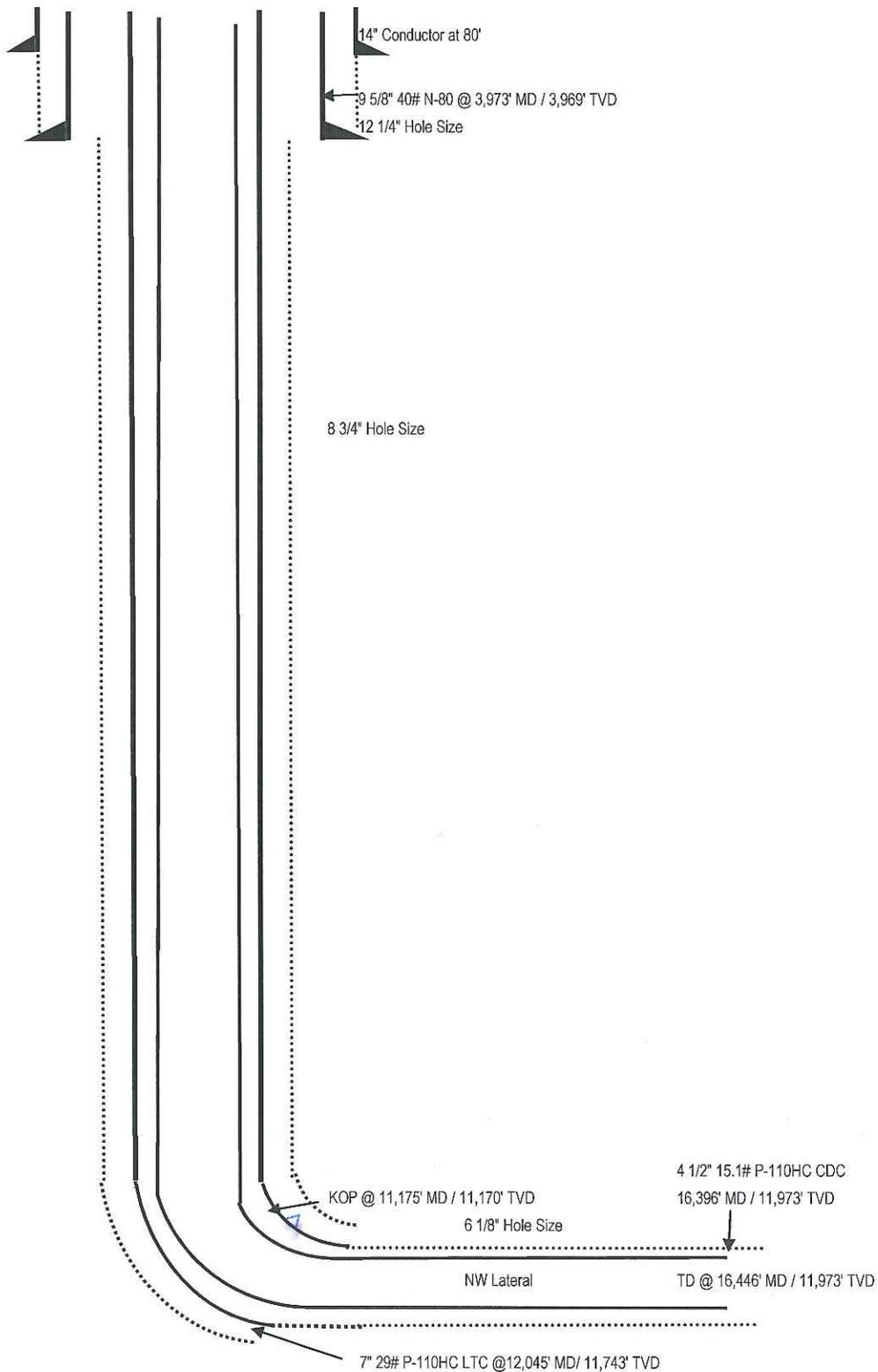
Proposed WBD

Uinta Basin

SHL: Sec 14-T7S-R22E, Uintah County, UT
BHL: Sec 14-T7S-R22E, Uintah County, UT

KB: 5,299'
GL: 5,269'

NOTE: NOT TO SCALE





QEP Energy Company

QEP ENERGY (UT)

Red Wash

RW 24-14AGR

RW 24-14AGR

Original Hole

Plan: Plan ver.0

Standard Planning Report

30 December, 2013





QEP Resources, Inc.
Planning Report



Database:	Compass	Local Co-ordinate Reference:	Well RW 24-14AGR
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5299.10usft (SST 88)
Project:	Red Wash	MD Reference:	RKB @ 5299.10usft (SST 88)
Site:	RW 24-14AGR	North Reference:	True
Well:	RW 24-14AGR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver.0		

Project	Red Wash		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		Using geodetic scale factor

Site	RW 24-14AGR				
Site Position:		Northing:	7,250,021.080 usft	Latitude:	40.204456
From:	Map	Easting:	2,224,224.980 usft	Longitude:	-109.409578
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.34 °

Well	RW 24-14AGR					
Well Position	+N-S	0.00 usft	Northing:	7,250,021.080 usft	Latitude:	40.204456
	+E-W	0.00 usft	Easting:	2,224,224.980 usft	Longitude:	-109.409578
Position Uncertainty		0.00 usft	Wellhead Elevation:	5,269.10 usft	Ground Level:	5,269.10 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/25/2013	10.75	65.99	52,206

Design	Plan ver.0			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.00	0.00	0.00	10.43

Plan Sections											
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00		
950.00	3.50	240.00	949.78	-5.34	-9.26	1.00	1.00	0.00	240.00		
3,000.00	3.50	240.00	2,995.96	-67.92	-117.64	0.00	0.00	0.00	0.00		
3,350.00	0.00	0.00	3,345.74	-73.26	-126.89	1.00	-1.00	0.00	180.00		
11,174.70	0.00	0.00	11,170.44	-73.26	-126.89	0.00	0.00	0.00	0.00		
12,044.70	87.00	358.29	11,742.61	469.47	-143.10	10.00	10.00	0.00	358.29		
12,194.70	87.00	358.29	11,750.46	619.20	-147.57	0.00	0.00	0.00	0.00		
12,750.90	87.00	15.00	11,779.79	1,168.94	-83.53	3.00	0.00	3.00	90.45		
16,446.65	87.00	15.00	11,973.26	4,733.88	871.67	0.00	0.00	0.00	30.53	RW 24-14AGR	



QEP Resources, Inc.
Planning Report



Database:	Compass	Local Co-ordinate Reference:	Well RW 24-14AGR
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5299.10usft (SST 88)
Project:	Red Wash	MD Reference:	RKB @ 5299.10usft (SST 88)
Site:	RW 24-14AGR	North Reference:	True
Well:	RW 24-14AGR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver.0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
950.00	3.50	240.00	949.78	-5.34	-9.26	-6.93	1.00	1.00	0.00
3,000.00	3.50	240.00	2,995.96	-67.92	-117.64	-88.10	0.00	0.00	0.00
3,350.00	0.00	0.00	3,345.74	-73.26	-126.89	-95.03	1.00	-1.00	0.00
11,174.70	0.00	0.00	11,170.44	-73.26	-126.89	-95.03	0.00	0.00	0.00
12,044.70	87.00	358.29	11,742.61	469.47	-143.10	435.79	10.00	10.00	0.00
12,194.70	87.00	358.29	11,750.46	619.20	-147.57	582.24	0.00	0.00	0.00
12,750.90	87.00	15.00	11,779.79	1,168.94	-83.53	1,134.48	3.00	0.00	3.00
16,446.65	87.00	15.00	11,973.26	4,733.88	871.67	4,813.46	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RW 24-14AGR - hit/miss target - Shape - Point	0.00	0.00	11,973.26	4,733.88	871.67	7,254,773.650	2,224,985.720	40.217450	-109.406457

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
3,973.26	3,969.00	9 5/8"	9-5/8	12-1/4	
12,044.70	11,742.61	7"	7	8-3/4	
16,446.65	11,973.26	4 1/2"	4-1/2	6-1/8	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,046.12	3,042.00	Green River fm		0.00		
3,382.26	3,378.00	Top of Birds Nest		0.00		
3,663.26	3,659.00	Base of Birds Nest		0.00		
3,923.26	3,919.00	Mahogany Bench		0.00		
5,203.26	5,199.00	Baes of Mod Saline		0.00		
6,586.26	6,582.00	Wasatch		0.00		
9,568.83	9,564.57	Mesaverde		3.00	15.00	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0569
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: 7.UNIT or CA AGREEMENT NAME: RED WASH
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: RW 24-14AGR
2. NAME OF OPERATOR: QEP ENERGY COMPANY	9. API NUMBER: 43047533070000
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078	PHONE NUMBER: 303 308-3068 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0085 FSL 1983 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 14 Township: 07.0S Range: 22.0E Meridian: S	9. FIELD and POOL or WILDCAT: RED WASH COUNTY: UINTAH 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: 11/26/2015	<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 checked="" 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.

QEP ENERGY COMPANY HEREBY REQUESTS A ONE YEAR EXTENSION FOR THE APD ON THE ABOVE CAPTIONED WELL.

Approved by the
 November 25, 2014
 Oil, Gas and Mining

Date: _____

By:

NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 11/24/2014	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047533070000

API: 43047533070000

Well Name: RW 24-14AGR

Location: 0085 FSL 1983 FWL QTR SESW SEC 14 TWNP 070S RNG 220E MER S

Company Permit Issued to: QEP ENERGY COMPANY

Date Original Permit Issued: 11/26/2012

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No

- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No

- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No

- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No

- Has the approved source of water for drilling changed? Yes No

- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No

- Is bonding still in place, which covers this proposed well? Yes No

Signature: Valyn Davis

Date: 11/24/2014

Title: Regulatory Affairs Analyst Representing: QEP ENERGY COMPANY

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: UTU0569
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL Gas Well		7. UNIT or CA AGREEMENT NAME: RED WASH
2. NAME OF OPERATOR: QEP ENERGY COMPANY		8. WELL NAME and NUMBER: RW 24-14AGR
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078		9. API NUMBER: 43047533070000
PHONE NUMBER: 303 595-5919 Ext		9. FIELD and POOL or WILDCAT: RED WASH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0085 FSL 1983 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 14 Township: 07.0S Range: 22.0E Meridian: S		COUNTY: UINTAH
		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"/> 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 checked="" type="checkbox"/> SPUD REPORT Date of Spud: 4/7/2015	<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 type="text"/>

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

ON DECEMBER 19, 2014, QEP ENERGY COMPANY SET 80' OF 14"
CONDUCTOR PIPE WITH READY MIX.

**Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
April 09, 2015**

NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 4/8/2015	

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.	
1. TYPE OF WELL Gas Well	5. LEASE DESIGNATION AND SERIAL NUMBER: UTU0569
2. NAME OF OPERATOR: QEP ENERGY COMPANY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078	7. UNIT or CA AGREEMENT NAME: RED WASH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0085 FSL 1983 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 14 Township: 07.0S Range: 22.0E Meridian: S	8. WELL NAME and NUMBER: RW 24-14AGR
PHONE NUMBER: 303 595-5919 Ext	9. API NUMBER: 43047533070000
9. FIELD and POOL or WILDCAT: RED WASH	COUNTY: Uintah
	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: 4/20/2015	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
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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.

QEP ENERGY COMPANY REQUESTS TO CHANGE THE BOTTOM HOLE LOCATION ON THE RW 24-14AGR. **NEW BOTTOM HOLE FOOTAGES ARE: 460' FNL, 1955' FEL. NWNE, SEC. 14, T7S, R22E. LAT: 40.217450, LONG: 109.404775.** NO ADDITIONAL SURFACE DISTURBANCE IS REQUIRED FOR THIS ACTION. QEP ENERGY COMPANY REQUESTS THIS WELL BE FILED AS "CONFIDENTIAL." PLEASE SEE ATTACHED: LEGAL PLAT, DRILL PLANS, DIRECTIONAL PLAN.

Approved by the
April 27, 2015
Oil, Gas and Mining

Date: _____

By:

NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 4/20/2015	

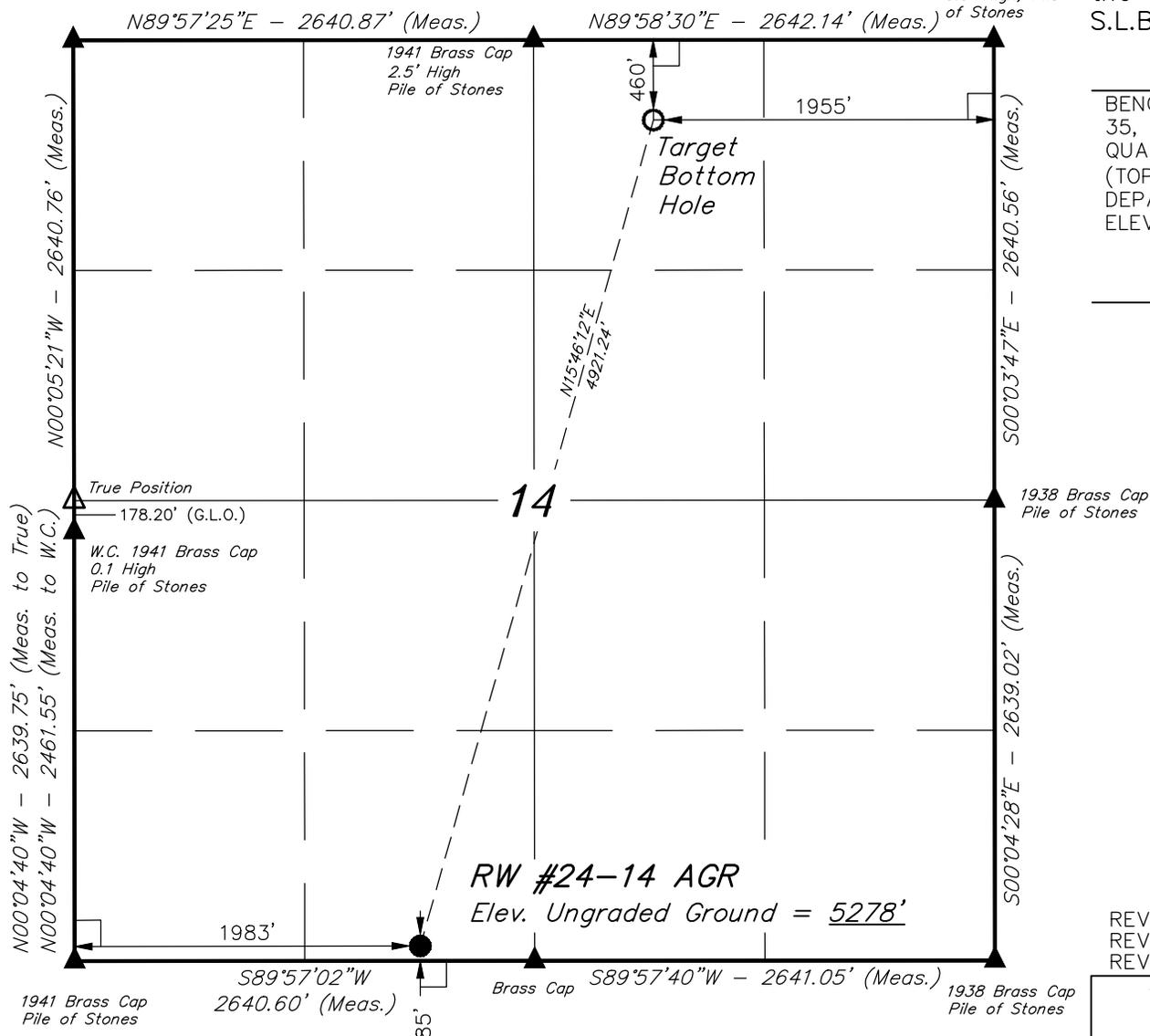
T7S, R22E, S.L.B.&M.

QEP ENERGY COMPANY

1941 Brass Cap
Pile of Stones

1938 Brass Cap,
0.6' High, Pile
of Stones

Well location, RW #24-14AGR, located as shown in the SE 1/4 SW 1/4 of Section 14, T7S, R22E, S.L.B.&M., Uintah County, Utah.

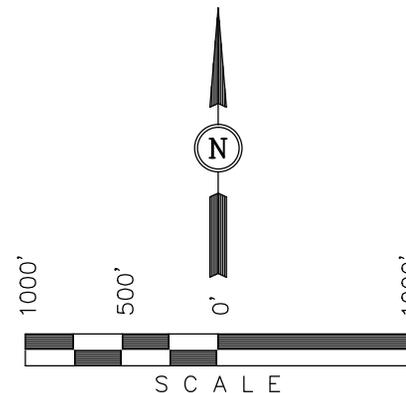


BASIS OF ELEVATION

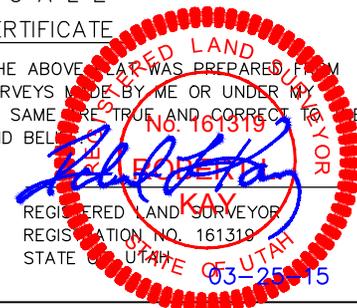
BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



REVISED: 03-24-15 Z.H.F.
 REVISED: 12-11-13 M.L.
 REVISED: 11-20-13 S.S.

LEGEND:

△ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

└─┘ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)		NAD 83 (SURFACE LOCATION)	
LATITUDE = 40°13'02.82" (40.217450)		LATITUDE = 40°12'16.04" (40.204456)	
LONGITUDE = 109°24'17.19" (109.404775)		LONGITUDE = 109°24'34.48" (109.409578)	
NAD 27 (TARGET BOTTOM HOLE)		NAD 27 (SURFACE LOCATION)	
LATITUDE = 40°13'02.95" (40.217486)		LATITUDE = 40°12'16.17" (40.204492)	
LONGITUDE = 109°24'14.72" (109.404089)		LONGITUDE = 109°24'32.01" (109.408892)	
STATE PLANE NAD 83		STATE PLANE NAD 83	
N: 7254784.40 E: 2225455.45		N: 7250021.08 E: 2224224.98	

UINTAH ENGINEERING & LAND SURVEYING
 85 SOUTH 200 EAST - VERNAL, UTAH 84078
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 04-25-12	DATE DRAWN: 06-05-12
PARTY G.O. S.R. R.L.L.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QEP ENERGY COMPANY	

DRILLING PROGRAM
RW 24-14AGR
Uintah County, Utah

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Estimated Formation Tops:

*This is a horizontal well:

<u>Formation</u>	<u>Depth, TVD</u>	<u>Depth, MD</u>	
Green River	3,039'	3,039'	Possible O & G
Bird's Nest	3,375'	3,375'	
Mahogany	3,916'	3,916'	
Base of Mod Saline	5,196'	5,196'	
Wasatch	6,579'	6,579'	Possible O & G
Mesaverde	9,333'	9,333'	Possible O & G
Kick Off Point	11,322'	11,322'	
TD	11,838'	16,504'	

2. Anticipated Depths of Oil, Gas, Water, and Other Mineral Bearing Zones

No fresh water sands are known in Red Wash. Oil and Gas bearing zones are shown above.

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted.

3. Pressure Control

Notify the BLM and/or State office prior to pressure testing.

- A. Below 9 5/8" surface casing - equipment & test plan (3,966' to 16,504' MD).
 - a. 11" 5,000 psi double gate with blind rams and appropriate pipe rams.
 - b. 11" 5,000 psi annular preventer and drilling spool or BOP with 2 side outlets.

Note: Depending on rig selection the BOP stack may be 7-1/16", 11" or 13 5/8". Additionally, the BOP stack may be 5M or 10M rated but will be tested per 5M requirements.

- B. Test pressures and times are as follows:
 - a. BOP: 5,000 psi (High) 250 psi (Low) – 10 min each
 - b. Choke Manifold & Lines: 5,000 psi (High) 250 psi (Low) – 10 min each
 - c. Annular Preventer: 2,500 psi (High) 250 psi (Low) – 10 min
 - d. Surface Casing: 1,500 psi – 30 min

- e. Formation Integrity Test below surface casing: Drill out 10' of new hole below casing. Perform FIT to 11.5 ppg EMW.
 - f. Formation Integrity Test below intermediate casing: Drill out 10' of new hole below casing and perform FIT to 13.0 ppg EMW.
- C. Function test pipe rams & blind ram on trips and annular once per week.
- D. All casing strings below conductor shall be tested to 0.22 psi/ft or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield. BOP equipment will be tested when initially installed, whenever any seal subject to test pressure is broken, following related repairs and at 30 day intervals.
- E. Ram type preventers and associated equipment shall be tested to the approved stack working pressure if isolated by a test plug or to 70% of the internal yield pressure of the casing if the BOP stack is not isolated from the casing. Annular preventers shall be tested to 50% of the rated working pressure.
- F. BOP and related equipment shall meet the minimum requirements of Onshore Oil & Gas Order No.2 for equipment testing, procedures, etc..., for the appropriate 5M approved system. Individual components will be operable as designed.
- G. Kill line (2" min), 2 choke line valves (3" min), choke line (3" min), 2 kill line valves (2" min) and a check valve, 2 chokes with one remotely controlled from rig floor and a pressure gauge on choke manifold.
- H. Auxiliary Equipment:
- a. Manually operated upper & lower kelly cock valves.
 - b. Floats may be run above any mud motor.
 - c. Monitoring of the mud system will be visual and with PVT equipment.
 - d. Manually operated, full opening floor valves that are capable of fitting all drill stem connections will be available in the full open position on the drill floor.

4. Casing Program

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, lb/ft	Grade	Thread	Condition	MW
17-1/2 "	14"	sfc	80'	Steel	Cond.	None	Used	Air
12 1/4"	9 5/8"	sfc	3,966'	40.0	N-80	LTC	New	8.8-9.3ppg
8 3/4"	7"	sfc	12,068'	29.0	P-110HC	LTC	New	9-10.5 ppg
6 1/8"	4 1/2"	11,322'	16,504'	15.1	HCQ-125	CDC	New	10-11.5 ppg

Note: Casing weights & grades are minimum values that meet design criteria. Higher weights and/or grades may be substituted depending on casing availability.

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9 5/8"	40.0 lb.	N-80	LTC	3,090 psi	5,750 psi	727,000 lb.
7"	29.0 lb.	P-110HC	LTC	9,750 psi	11,220 psi	797,000 lb.
4 1/2"	15.1 lb.	HCQ-125	CDC	16,070 psi	15,300 psi	551,000 lb.

Please refer to the attached wellbore diagram for further details.

MINIMUM DESIGN FACTORS:

COLLAPSE: 1.125 based on .1 psi/ft fluid back-up inside, .58 psi/ft gradient

BURST: 1.000 based on .58 psi/ft gradient, no fluid on backside

TENSION: 1.800 based on casing string weight in 9.0 ppg mud

Area Fracture Gradient: 0.83 psi/foot

5. Cementing Program

14" Conductor: Cement to surface with construction cement.

9-5/8" Surface Casing: Surface – 3,966' (MD)

Lead Slurry: Surface – 3,466': 970 sx (2,160 ft³) Halliburton Varicem, 0.1% FE-2, 0.125 pps Poly-E-Flake, 3pps Phenoseal, Slurry Weight 12.0 ppg, 2.24 ft³/sk, 100% excess in open hole.

Tail Slurry: 3,466' – 3,966': 285 sx (330 ft³) Halliburton Halcem, 0.125 pps Poly-E-Flake, 0.25pps Kwik Seal, Slurry Weight 15.8 ppg, 1.16 ft³/sk, 100% excess in open hole.

7" Intermediate Casing: sfc – 12,068' (MD)

Lead: Surface – 8,833'. 830 sx (1,726 ft³) Halliburton VersaSeal + 2% Chem-Foamer 760 + 0.5% HR-601 (Retarder), 0.125pps Poly-E-Flake, 0.25pps Kwik Seal, Slurry Weight 13.5 ppg (10.5ppg foamed), Slurry Yield 2.092 ft³/sk, with 50% Excess in open hole.

Tail Slurry: 8,833' – 12,068'. 475 sks (739 ft³) Halliburton Versacem + 0.5% HR-601 (Retarder), 0.125 pps Poly-E-Flake (LCM), 0.25pps Kwik Seal (LCM). Slurry wt: 13.5 ppg, Slurry yield: 1.57 ft³/sk, with 50% excess in open hole.

4-1/2" Production Casing: Production casing will **not be cemented**

The production casing string will consist of the following:

- a) Float shoe
- b) Double float Collar
- c) Initiator sleeve
- d) (28) Open hole frac stages consisting of (1) frac sleeve and (2) 5.85" swell packers, spaced evenly from TD to just inside the 7" casing shoe (28 sleeves, 27 open hole packers) with 4-1/2" 15.1 ppf HCQ-125, CDC casing between packers/sleeves.

- e) (2) Cased hole frac stages consisting of (2) 5.85" swell packers spaced inside the 7" casing with 4-1/2" 15.1 ppf HCQ-125, CDC casing between packers.
- f) (2) 5.85" swell packers (for isolation inside 7" Intermediate casing)
- g) 4-1/2" 15.1 ppf HCQ-125, CDC to liner hanger depth of 11,322' MD/TVD.
- h) 4-1/2" 15.1 ppf HCQ-125, CDC tie-back string to surface.

No centralizers will be utilized.

6. **Mud Program**

Fresh water with possible addition of lost circulation products will be used to drill the surface hole section of the well (0' – 3,966' MD).

Water based mud will be used to drill the intermediate hole section of the well (3,966' – 12,068' MD). The 9-5/8" surface casing will be drilled out 10' and a Formation Integrity Test will be performed to an equivalent of 11.5 ppg. Anticipated mud weight at casing point will be < 11.0-11.5 ppg. (.58 psi/ft)

Oil base mud will be used to drill the production section of the hole (12,068' – 16,504' MD). The 7" casing will be drilled out 10' and a Formation Integrity Test will be performed to an equivalent of 13.0ppg. Maximum anticipated mud weight at TD will be 11.5 ppg. Additional information for oil base mud is listed below.

Sufficient mud materials to maintain mud properties, control lost circulation and to contain well bore pressures will be available at the wellsite.

7. **Testing, Logging, and Coring Program**

Mud logging from surface casing point to TD

OH Logs: GR-SP-Induction, Neutron Density to be run in the intermediate section to KOP.

MWD-GR will be utilized during drilling operations to aid in landing the curve and maintaining the laterals within the desired zone.

No DST's or cores are planned for this well.

8. **Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated. H2S has not been encountered or is known to exist from previous wells drilled to similar depths in the general area.

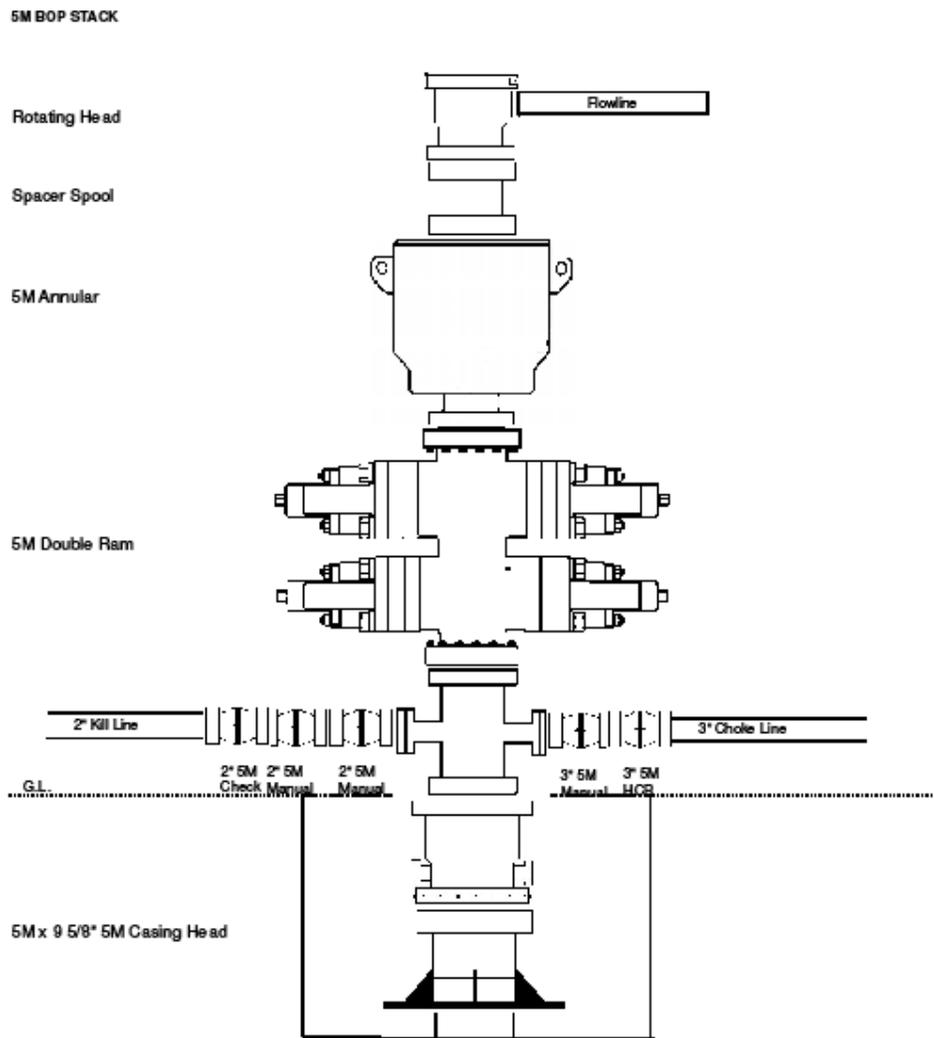
Max anticipated bottom hole pressure (approx, psi): 7,079

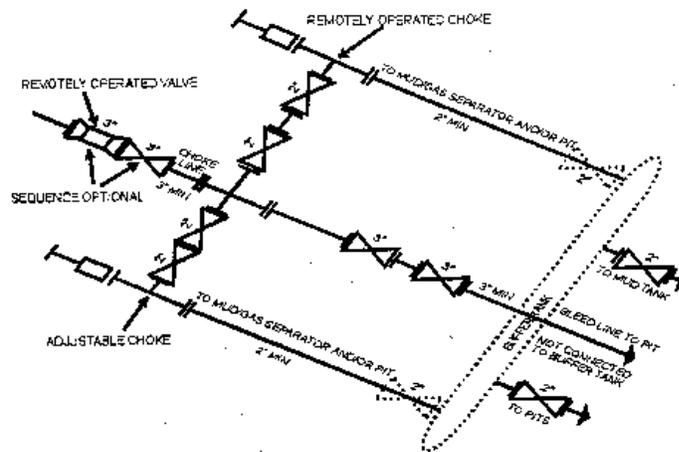
Max anticipated bottom hole temperature (approx, deg F): 200

Max anticipated Surface SIP is less than 5,000 psi [(7,079 psi – (.22 psi/ft * 11,838 ft) = 4,475 psi]

9. Additional Information For Oil Base Mud

- A. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 0.030" (0.75 mm +/-) thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.
- B. Oil-base mud will be mixed in the closed circulating system and transferred to one or more 400 bbl or 500 bbl tanks (as available) on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be transferred to the cuttings pit nearest the shakers and stored in this cuttings pit for solidification after the rig is released and moved off location.
- C. The means to transport the cuttings from the solids control equipment to the OBM cuttings pit will be dictated by the size of the location:
- Option 1: By track-hoe or similar equipment from a cuttings bin to the cuttings pit.
- Option 2: By 10" PVC pipe or equivalent steel piping. Water will be pumped to the solids control equipment and will convey the OBM cuttings from the solids control equipment to the OBM cuttings pit via the PVC pipe. The water will be recycled multiple times from the cuttings pit to continue to transport the cuttings to the cuttings pit. The conveyance system will be enclosed on the solids control end to prevent spills. The conveyance piping system at the cuttings pit end will be placed on top of pit liner to eliminate absorption of fluids into the soil.
- D. Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings pit.
- E. All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.
- F. Once all waste has been placed in the cuttings pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings pit and will be returned to the existing grade bordering the pit.





5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 284, 384, 1084, OR 15M drawings, it would also be applicable to these situations.

[54 FR 39528, Sept. 27, 1989]

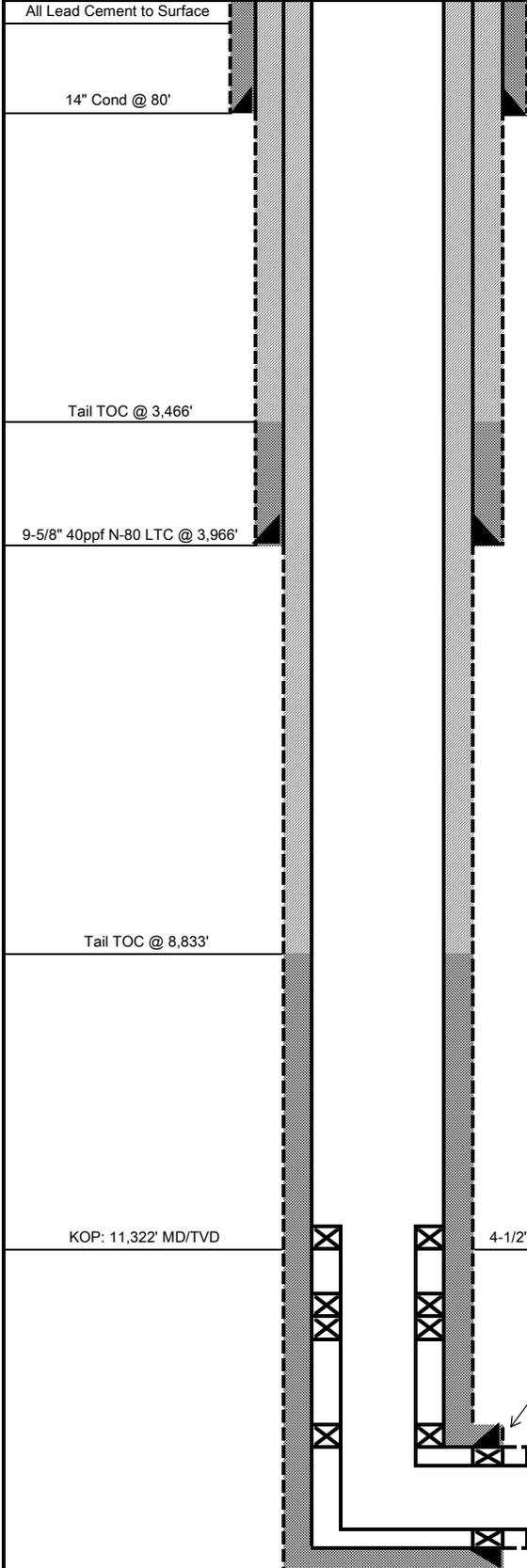
QEP Energy Co.
RW 24-14AGR Wellbore Diagram
 Uintah County, Utah
 API: 43-047-53307

Prepared by: SHK

SHL: 85' FSL 1983' FWL Sec. 14-T7S-R22E
 BHL: 460' FNL 1955' FEL Sec. 14-T7S-R22E

GL Elevation: 5,266'
 KB Elevation: 5,296'

Planned Total Depth: 16,504' MD/ 11,838' TVD



Conductor	
Hole Size:	17.5" Auger
Conductor:	80', 14"
Cement:	1.0 yd ³ RediMix
TOC:	Surface

Surface	
Hole Size	12-1/4"
Casing	3,966' 9-5/8", 40ppf, N-80, LTC; Cemented to Surface
Mud Type	Fresh Water w/ PHPA Sweeps for hole cleaning
Lead Cmt	970sx Varicem w/0.1% FE-2, 0.125pps Poly-E-Flake, 3pps Phenoseal, 12ppg, 100% Excess
Tail Cmt	285sx Halcem w/ 0.125pps Poly-E-Flake, 0.25 Kwik Seal, 15.8ppg, 100% excess
BOPE	11" 5,000psi
FIT after drillout	11.5 EMW

Intermediate	
Hole Size:	8-3/4"
Casing	12,068' 7", 29ppf, HCP-110, LTC; Cemented to Surface
Mud Type	WBM 9.0-10.5ppg
Lead Cmt	830 sx Versaseal w/ 2% Chem-Foamer 760, 0.5% HR-601, 0.125pps Poly-E-Flake, 0.25pps Kwik Seal 13.5ppg (10.5ppg foamed), 50% excess
Tail Cmt	475 sx VersaCem w/ 0.5% HR-601, 0.125 Poly-E-Flake, 0.25pps Kwik Seal 13.5ppg, 50% excess
Cement Cap	100sx Class G 15.6ppg
BOPE	11" 5,000psi
FIT after Drillout	13.0ppg EMW

Production Liner	
Hole Size:	6-1/8"
Frac String	0'-11,322' 4-1/2", 15.1ppf, HCQ-125, CDC; Uncemented
Liner	11,322'-16,504' 4-1/2", 15.1ppf, HCQ-125, CDC; Uncemented
Mud Type	OBM 10.0-11.5ppg
Hanger Depth	11,322' MD/TVD
BOPE	11" 5,000psi

Sliding Sleeve and Swell Packer Information	
# Stages	(2) Cased Hole, (28) Open hole w/ Sliding sleeves spaced between packers
OH Packers	(27) 5.85" Swellable
CH Packer	(2) 5.85" Swellable for two cased hole stages, (2) 5.85" Swellable for isolation
Displacement	2% KCl substitute

Total Depth: 16,504' MD/ 11,838' TVD

QEP ENERGY (UT)

**Red Wash - A
RW 24-14AGR
RW 24-14AGR**

Original Hole

Plan: Plan ver. 3

Standard Planning Report

30 March, 2015

QEP Resources

Planning Report

Database:	EDMDB_QEP	Local Co-ordinate Reference:	Well RW 24-14AGR
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5296.30usft (SST 88)
Project:	Red Wash - A	MD Reference:	RKB @ 5296.30usft (SST 88)
Site:	RW 24-14AGR	North Reference:	True
Well:	RW 24-14AGR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver. 3		

Project	Red Wash - A		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		Using geodetic scale factor

Site	RW 24-14AGR				
Site Position:		Northing:	7,250,021.080 usft	Latitude:	40.204456
From:	Map	Easting:	2,224,224.980 usft	Longitude:	-109.409578
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.34 °

Well	RW 24-14AGR					
Well Position	+N/-S	0.00 usft	Northing:	7,250,021.080 usft	Latitude:	40.204456
	+E/-W	0.00 usft	Easting:	2,224,224.980 usft	Longitude:	-109.409578
Position Uncertainty		0.00 usft	Wellhead Elevation:	5,266.30 usft	Ground Level:	5,266.30 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/25/2013	10.75	65.99	52,206

Design	Plan ver. 3			
Audit Notes:	ver. 3 - update BHL and graded ground elevation			
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	15.82

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
11,321.69	0.00	0.00	11,321.69	0.00	0.00	0.00	0.00	0.00	0.00	
12,067.52	89.50	15.82	11,799.14	455.37	129.03	12.00	12.00	0.00	15.82	
16,504.47	89.50	15.82	11,837.86	4,724.10	1,338.57	0.00	0.00	0.00	0.00	

QEP Resources

Planning Report

Database:	EDMDB_QEP	Local Co-ordinate Reference:	Well RW 24-14AGR
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5296.30usft (SST 88)
Project:	Red Wash - A	MD Reference:	RKB @ 5296.30usft (SST 88)
Site:	RW 24-14AGR	North Reference:	True
Well:	RW 24-14AGR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver. 3		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,039.00	0.00	0.00	3,039.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green River fm										
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,375.00	0.00	0.00	3,375.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Top of Birds Nest										
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,656.00	0.00	0.00	3,656.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Birds Nest										
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,916.00	0.00	0.00	3,916.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mahogany Bench										
3,966.00	0.00	0.00	3,966.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"										
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QEP Resources

Planning Report

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Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5296.30usft (SST 88)
Project:	Red Wash - A	MD Reference:	RKB @ 5296.30usft (SST 88)
Site:	RW 24-14AGR	North Reference:	True
Well:	RW 24-14AGR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver. 3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,196.00	0.00	0.00	5,196.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Mod Saline									
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,579.00	0.00	0.00	6,579.00	0.00	0.00	0.00	0.00	0.00	0.00
Wasatch									
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00

QEP Resources

Planning Report

Database:	EDMDB_QEP	Local Co-ordinate Reference:	Well RW 24-14AGR
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5296.30usft (SST 88)
Project:	Red Wash - A	MD Reference:	RKB @ 5296.30usft (SST 88)
Site:	RW 24-14AGR	North Reference:	True
Well:	RW 24-14AGR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver. 3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,333.00	0.00	0.00	9,333.00	0.00	0.00	0.00	0.00	0.00	0.00
Mesaverde									
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,200.00	0.00	0.00	10,200.00	0.00	0.00	0.00	0.00	0.00	0.00
10,300.00	0.00	0.00	10,300.00	0.00	0.00	0.00	0.00	0.00	0.00
10,400.00	0.00	0.00	10,400.00	0.00	0.00	0.00	0.00	0.00	0.00
10,500.00	0.00	0.00	10,500.00	0.00	0.00	0.00	0.00	0.00	0.00
10,600.00	0.00	0.00	10,600.00	0.00	0.00	0.00	0.00	0.00	0.00
10,700.00	0.00	0.00	10,700.00	0.00	0.00	0.00	0.00	0.00	0.00
10,800.00	0.00	0.00	10,800.00	0.00	0.00	0.00	0.00	0.00	0.00
10,900.00	0.00	0.00	10,900.00	0.00	0.00	0.00	0.00	0.00	0.00
11,000.00	0.00	0.00	11,000.00	0.00	0.00	0.00	0.00	0.00	0.00
11,100.00	0.00	0.00	11,100.00	0.00	0.00	0.00	0.00	0.00	0.00
11,200.00	0.00	0.00	11,200.00	0.00	0.00	0.00	0.00	0.00	0.00
11,228.00	0.00	0.00	11,228.00	0.00	0.00	0.00	0.00	0.00	0.00
Disturbed Zone*									
11,300.00	0.00	0.00	11,300.00	0.00	0.00	0.00	0.00	0.00	0.00
11,320.00	0.00	0.00	11,320.00	0.00	0.00	0.00	0.00	0.00	0.00
Neslen*									
11,321.69	0.00	0.00	11,321.69	0.00	0.00	0.00	0.00	0.00	0.00
11,400.00	9.40	15.82	11,399.65	6.16	1.75	6.41	12.00	12.00	0.00
11,500.00	21.40	15.82	11,495.88	31.66	8.97	32.91	12.00	12.00	0.00
11,600.00	33.40	15.82	11,584.51	75.86	21.49	78.84	12.00	12.00	0.00
11,700.00	45.40	15.82	11,661.64	136.81	38.76	142.19	12.00	12.00	0.00
11,752.84	51.74	15.82	11,696.59	174.90	49.56	181.79	12.00	12.00	0.00
Neslen Lower*									
11,800.00	57.40	15.82	11,723.92	211.86	60.03	220.20	12.00	12.00	0.00
11,900.00	69.40	15.82	11,768.62	297.73	84.36	309.45	12.00	12.00	0.00
11,947.50	75.10	15.82	11,783.10	341.24	96.69	354.67	12.00	12.00	0.00
Top Window									
12,000.00	81.40	15.82	11,793.78	390.66	110.69	406.04	12.00	12.00	0.00
12,065.00	89.20	15.82	11,799.11	452.95	128.34	470.78	12.00	12.00	0.00
Target									
12,067.52	89.50	15.82	11,799.14	455.37	129.03	473.29	12.00	12.00	0.00
7"									
12,100.00	89.50	15.82	11,799.42	486.62	137.88	505.77	0.00	0.00	0.00
12,200.00	89.50	15.82	11,800.29	582.83	165.14	605.77	0.00	0.00	0.00
12,300.00	89.50	15.82	11,801.17	679.03	192.40	705.77	0.00	0.00	0.00
12,400.00	89.50	15.82	11,802.04	775.24	219.66	805.76	0.00	0.00	0.00
12,500.00	89.50	15.82	11,802.91	871.45	246.92	905.76	0.00	0.00	0.00
12,600.00	89.50	15.82	11,803.78	967.66	274.18	1,005.75	0.00	0.00	0.00
12,700.00	89.50	15.82	11,804.66	1,063.87	301.45	1,105.75	0.00	0.00	0.00
12,800.00	89.50	15.82	11,805.53	1,160.08	328.71	1,205.75	0.00	0.00	0.00
12,900.00	89.50	15.82	11,806.40	1,256.29	355.97	1,305.74	0.00	0.00	0.00
13,000.00	89.50	15.82	11,807.27	1,352.49	383.23	1,405.74	0.00	0.00	0.00

QEP Resources

Planning Report

Database:	EDMDB_QEP	Local Co-ordinate Reference:	Well RW 24-14AGR
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5296.30usft (SST 88)
Project:	Red Wash - A	MD Reference:	RKB @ 5296.30usft (SST 88)
Site:	RW 24-14AGR	North Reference:	True
Well:	RW 24-14AGR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver. 3		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,100.00	89.50	15.82	11,808.15	1,448.70	410.49	1,505.74	0.00	0.00	0.00	
13,200.00	89.50	15.82	11,809.02	1,544.91	437.75	1,605.73	0.00	0.00	0.00	
13,300.00	89.50	15.82	11,809.89	1,641.12	465.01	1,705.73	0.00	0.00	0.00	
13,400.00	89.50	15.82	11,810.76	1,737.33	492.27	1,805.72	0.00	0.00	0.00	
13,500.00	89.50	15.82	11,811.64	1,833.54	519.53	1,905.72	0.00	0.00	0.00	
13,600.00	89.50	15.82	11,812.51	1,929.75	546.79	2,005.72	0.00	0.00	0.00	
13,700.00	89.50	15.82	11,813.38	2,025.95	574.05	2,105.71	0.00	0.00	0.00	
13,800.00	89.50	15.82	11,814.26	2,122.16	601.31	2,205.71	0.00	0.00	0.00	
13,900.00	89.50	15.82	11,815.13	2,218.37	628.57	2,305.71	0.00	0.00	0.00	
14,000.00	89.50	15.82	11,816.00	2,314.58	655.83	2,405.70	0.00	0.00	0.00	
14,100.00	89.50	15.82	11,816.87	2,410.79	683.09	2,505.70	0.00	0.00	0.00	
14,200.00	89.50	15.82	11,817.75	2,507.00	710.35	2,605.69	0.00	0.00	0.00	
14,300.00	89.50	15.82	11,818.62	2,603.21	737.61	2,705.69	0.00	0.00	0.00	
14,400.00	89.50	15.82	11,819.49	2,699.41	764.88	2,805.69	0.00	0.00	0.00	
14,500.00	89.50	15.82	11,820.36	2,795.62	792.14	2,905.68	0.00	0.00	0.00	
14,600.00	89.50	15.82	11,821.24	2,891.83	819.40	3,005.68	0.00	0.00	0.00	
14,700.00	89.50	15.82	11,822.11	2,988.04	846.66	3,105.67	0.00	0.00	0.00	
14,800.00	89.50	15.82	11,822.98	3,084.25	873.92	3,205.67	0.00	0.00	0.00	
14,900.00	89.50	15.82	11,823.85	3,180.46	901.18	3,305.67	0.00	0.00	0.00	
15,000.00	89.50	15.82	11,824.73	3,276.67	928.44	3,405.66	0.00	0.00	0.00	
15,100.00	89.50	15.82	11,825.60	3,372.88	955.70	3,505.66	0.00	0.00	0.00	
15,200.00	89.50	15.82	11,826.47	3,469.08	982.96	3,605.66	0.00	0.00	0.00	
15,300.00	89.50	15.82	11,827.35	3,565.29	1,010.22	3,705.65	0.00	0.00	0.00	
15,400.00	89.50	15.82	11,828.22	3,661.50	1,037.48	3,805.65	0.00	0.00	0.00	
15,500.00	89.50	15.82	11,829.09	3,757.71	1,064.74	3,905.64	0.00	0.00	0.00	
15,600.00	89.50	15.82	11,829.96	3,853.92	1,092.00	4,005.64	0.00	0.00	0.00	
15,700.00	89.50	15.82	11,830.84	3,950.13	1,119.26	4,105.64	0.00	0.00	0.00	
15,800.00	89.50	15.82	11,831.71	4,046.34	1,146.52	4,205.63	0.00	0.00	0.00	
15,900.00	89.50	15.82	11,832.58	4,142.54	1,173.78	4,305.63	0.00	0.00	0.00	
16,000.00	89.50	15.82	11,833.45	4,238.75	1,201.04	4,405.63	0.00	0.00	0.00	
16,100.00	89.50	15.82	11,834.33	4,334.96	1,228.30	4,505.62	0.00	0.00	0.00	
16,200.00	89.50	15.82	11,835.20	4,431.17	1,255.57	4,605.62	0.00	0.00	0.00	
16,300.00	89.50	15.82	11,836.07	4,527.38	1,282.83	4,705.61	0.00	0.00	0.00	
16,400.00	89.50	15.82	11,836.94	4,623.59	1,310.09	4,805.61	0.00	0.00	0.00	
16,500.00	89.50	15.82	11,837.82	4,719.80	1,337.35	4,905.61	0.00	0.00	0.00	
16,504.47	89.50	15.82	11,837.86	4,724.10	1,338.57	4,910.08	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
RW 24-14AGR	0.00	0.00	11,837.94	4,733.64	1,341.56	7,254,784.400	2,225,455.450	40.217449	-109.404775	
- hit/miss target										
- Shape										
- Point										
										- plan misses target center by 10.00usft at 16504.47usft MD (11837.86 TVD, 4724.10 N, 1338.57 E)

QEP Resources

Planning Report

Database:	EDMDB_QEP	Local Co-ordinate Reference:	Well RW 24-14AGR
Company:	QEP ENERGY (UT)	TVD Reference:	RKB @ 5296.30usft (SST 88)
Project:	Red Wash - A	MD Reference:	RKB @ 5296.30usft (SST 88)
Site:	RW 24-14AGR	North Reference:	True
Well:	RW 24-14AGR	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan ver. 3		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
3,966.00	3,966.00	9 5/8"	9-5/8	12-1/4	
12,067.52	11,799.14	7"	7	8-3/4	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,039.00	3,039.00	Green River fm		0.50	15.00
3,375.00	3,375.00	Top of Birds Nest		0.50	15.00
3,656.00	3,656.00	Base of Birds Nest		0.50	15.00
3,916.00	3,916.00	Mahogany Bench		0.50	15.00
5,196.00	5,196.00	Base of Mod Saline		0.50	15.00
6,579.00	6,579.00	Wasatch		0.50	15.00
9,333.00	9,333.00	Mesaverde		0.50	15.00
11,228.00	11,228.00	Disturbed Zone*		0.50	15.00
11,320.00	11,320.00	Neslen*		0.50	15.00
11,752.84	11,696.59	Neslen Lower*		0.50	15.00
11,947.50	11,783.10	Top Window		0.50	15.00
12,065.00	11,799.11	Target		0.50	15.00

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,321.69	11,321.69	0.00	0.00	Start Build 12.00
12,067.52	11,799.14	455.37	129.03	Start 4436.95 hold at 12067.52 MD
16,504.47	11,837.86	4,724.10	1,338.57	TD at 16504.47



Sundry Number: 62775 API Well Number: 43047533070000

Company Name: QEP ENERGY (UT)



Azimuths to True North
Magnetic North: 10.75°
Magnetic Field
Strength: 52206.0eT
Dip Angle: 65.99°
Date: 11/25/2013
Model: IGRF2010

Project: Red Wash - A
Site: RW 24-14AGR
Well: RW 24-14AGR
Wellbore: Original Hole
Design: Plan ver. 3

WELL DETAILS: RW 24-14AGR

Ground Level: 5266.30						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	7250021.080	2224224.980	40.204455	-109.409578	

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well RW 24-14AGR, True North
Vertical (TVD) Reference: RKB @ 5296.30usft (SST 88)
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: RKB @ 5296.30usft (SST 88)
Calculation Method: Minimum Curvature

PROJECT DETAILS: Red Wash - A

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Utah Central Zone

System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape Point
RW 24-14AGR	11837.94	4733.64	1341.56	7254784.400	2225455.450	

FORMATION TOP DETAILS

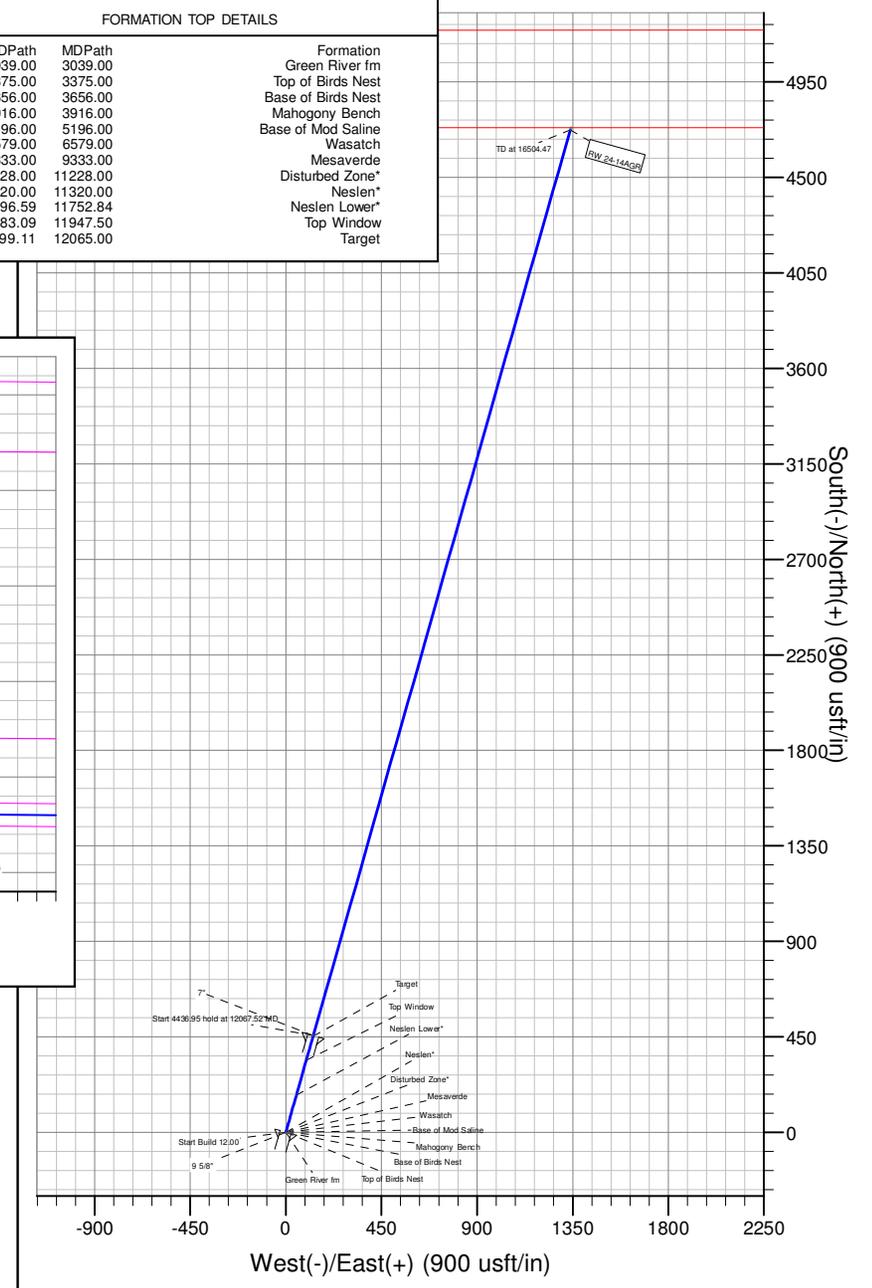
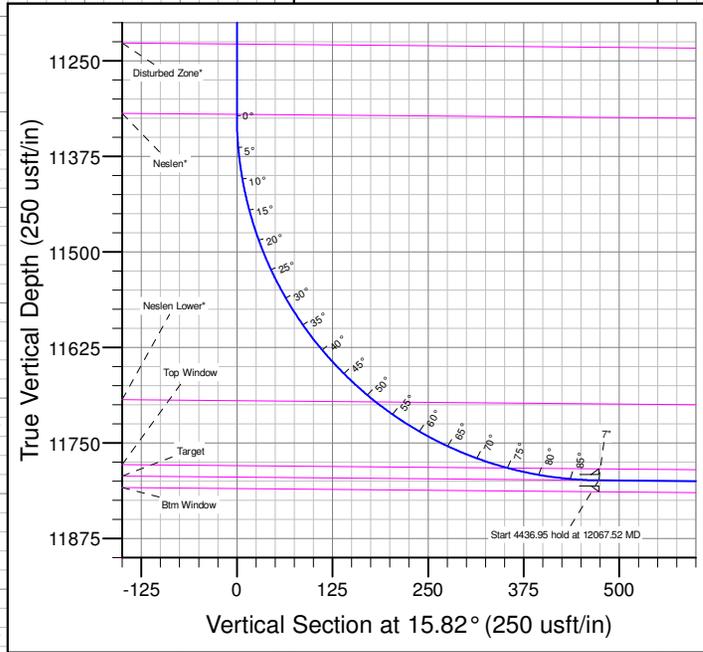
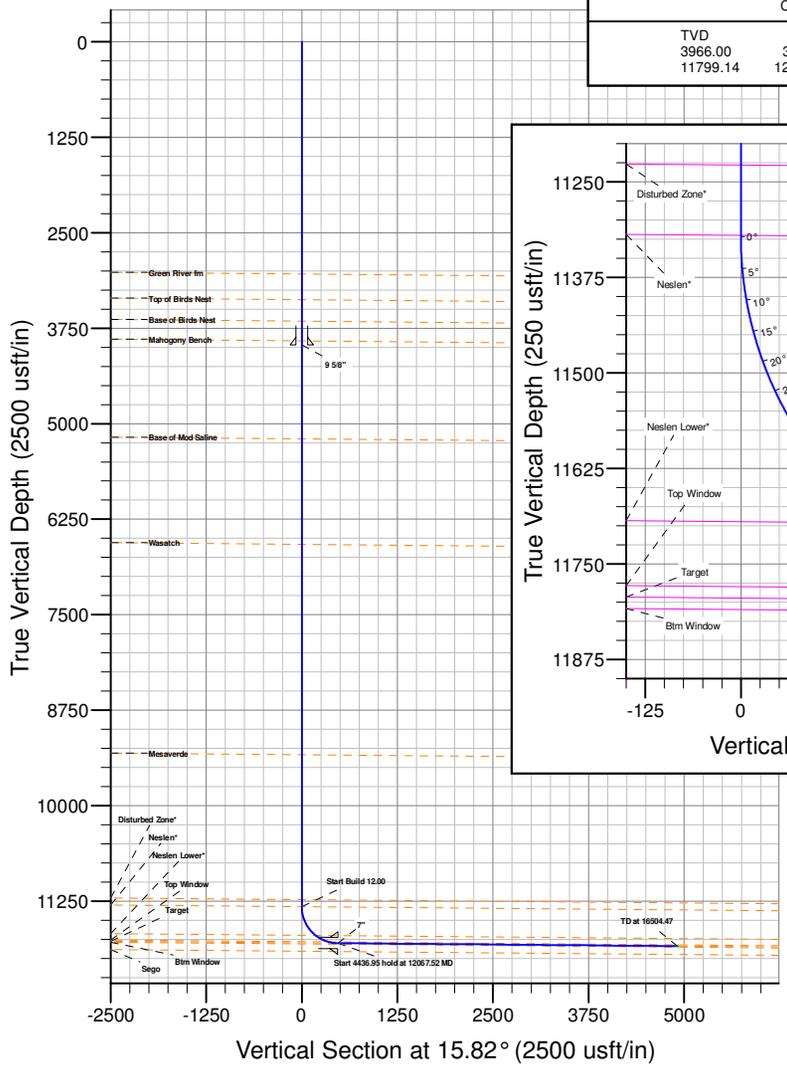
TVDPath	MDPath	Formation
3039.00	3039.00	Green River fm
3375.00	3375.00	Top of Birds Nest
3656.00	3656.00	Base of Birds Nest
3916.00	3916.00	Mahogany Bench
5196.00	5196.00	Base of Mod Saline
6579.00	6579.00	Wasatch
9333.00	9333.00	Mesaverde
11228.00	11228.00	Disturbed Zone*
11320.00	11320.00	Neslen*
11696.59	11752.84	Neslen Lower*
11783.09	11947.50	Top Window
11799.11	12065.00	Target

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11321.69	0.00	0.00	11321.69	0.00	0.00	0.00	0.00
12067.52	89.50	15.82	11799.14	455.37	129.03	12.00	473.30
16504.47	89.50	15.82	11837.86	4724.10	1338.57	0.00	4910.08

CASING DETAILS

TVD	MD	Name	Size
3966.00	3966.00	9 5/8"	9-5/8
11799.14	12067.52	7"	7



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: UTU0569
1. TYPE OF WELL Gas Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: QEP ENERGY COMPANY		7. UNIT or CA AGREEMENT NAME: RED WASH
3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078		8. WELL NAME and NUMBER: RW 24-14AGR
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0085 FSL 1983 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 14 Township: 07.0S Range: 22.0E Meridian: S		9. API NUMBER: 43047533070000
PHONE NUMBER: 303 595-5919 Ext		9. FIELD and POOL or WILDCAT: RED WASH
COUNTY: UINTAH		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"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 7/28/2015	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<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 checked="" 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: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <p style="text-align: center; font-size: 1.2em;">THIS WELL COMMENCED PRODUCTION ON JULY 28, 2015.</p> <div style="text-align: right; margin-top: 20px;"> <p>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 03, 2015</p> </div>		
NAME (PLEASE PRINT) Valyn Davis	PHONE NUMBER 435 781-4369	TITLE Regulatory Affairs Analyst
SIGNATURE N/A	DATE 7/30/2015	

CONFIDENTIAL

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 GAS WELL DRY OTHER _____

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

2. NAME OF OPERATOR: **QEP ENERGY COMPANY**

3. ADDRESS OF OPERATOR: 11002 E 17500 S CITY VERNAL STATE UT ZIP 84078 PHONE NUMBER: (435) 781-4369

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: **SESW, 14-T7S-R22E, 85' FSL, 1983' FWL**
AT TOP PRODUCING INTERVAL REPORTED BELOW: **SESW, 14-T7S-R22E, 47' FSL, 2093' FWL**
AT TOTAL DEPTH: **NWNE, 14-T7S-R22E, 472' FNL, 2044' FEL**

5. LEASE DESIGNATION AND SERIAL NUMBER: **UTU0569**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME: **RED WASH**

8. WELL NAME and NUMBER: **RW 24-14AGR**

9. API NUMBER: **4304753307**

10. FIELD AND POOL, OR WILDCAT: **RED WASH**

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
SESW 14 T7S R22 S

12. COUNTY: **UINTAH** 13. STATE: **UTAH**

14. DATE SPURRED: **4/7/2015** 15. DATE T.D. REACHED: **7/4/2015** 16. DATE COMPLETED: **7/28/2015** ABANDONED READY TO PRODUCE 17. ELEVATIONS (DF, RKB, RT, GL): **5269**

18. TOTAL DEPTH: MD **16,673** TVD **11,939** 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): **TRIPLE COMBO**

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
16	14 J-55	36	0	110	110	250	350	0	
12.25	9.625 L-80	40	0	3,984	3,984	1468	488	0	
8.75	7 P-110	29	0	12,136	12,136	1430	400	0	
6.125	4.5 Q-125	15.1	0	16,668	16,668	0	0		

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)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) MESAVERDE	11,730	16,578			11,730 11,995	.37	242	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B)					11,995 16,578	.75	756	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

27. PERFORATION RECORD

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

WAS WELL HYDRAULICALLY FRACTURED? YES NO IF YES -- DATE FRACTURED: **7/21/2015**

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
11730-16578	178,792 BBLs SLICKWATER, 1,246,720 #S 30/50 SAND, 5,567,600 #S 100 MESH, 1,086,320 #S 30/50 PRC

29. ENCLOSED ATTACHMENTS:

ELECTRICAL/MECHANICAL LOGS GEOLOGIC REPORT DST REPORT DIRECTIONAL SURVEY
 SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION CORE ANALYSIS OTHER: **DRL, PERF, OPS**

30. WELL STATUS:

CONFIDENTIAL

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 7/28/2015		TEST DATE: 8/12/2015		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 15	GAS – MCF: 7,139	WATER – BBL: 1,202	PROD. METHOD: FLOW
CHOKE SIZE: 38/64	TBG. PRESS. 0	CSG. PRESS. 1,485	API GRAVITY	BTU – GAS	GAS/OIL RATIO 6	24 HR PRODUCTION RATES: →	OIL – BBL: 15	GAS – MCF: 7,139	WATER – BBL: 1,202	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.)

CAPTURED

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:

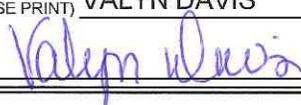
Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER	3,036
				MAHOGANY MARKER	3,840
				WASATCH	6,663
				MESAVERDE	9,369
				SEGO	11,891

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) VALYN DAVIS

TITLE PERMIT AGENT

SIGNATURE 

DATE 8/24/2015

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



Daily Activity and Cost Summary

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
Job Category DRILLING	Primary Job Type AFE - DRL-DR (Drilling)	Secondary Job Type	Objective			
Start Date 4/30/2015	Job End Date 7/10/2015					
Purpose						
Summary						
Contractor SST Energy	RIG SST 88	Rig Type TOP DRIVE				
RPT #	Start Date	Summary				
1	4/30/2015	WAIT ON DAY LIGHT				
2	5/1/2015	FINISH RIGGING DOWN DERRICK,SUBS, MUD TANKS, MATS, SKID RAILS, AND BACK YARD ON OLD LOCATION, MOVE TO NEW LOCATION AND SET MUD TANKS, PUMPS, SCR, GEN PACK, SUB MATS, SKID RAILS, SUBS AT 09:05 AM WESTROC TRUCK WAS UNLOADING MUD TANK AND BACK INTO MOTOR RADIATOR, MOVE HOUSES AND RIG UP 90% RIGED DOWN 85% MOVED 30% RIGED UP				
3	5/2/2015	SET SUBS, DRAWWORK, ROTARY, SPREADERS BEAMS, THREE HOUSES ON RIG FLOOR, PIN DERRICK ON RIG FLOOR, STRING UP, DRAG LINK, RUNNING POWER CABLES, GAS BUSTER, R/U MUD PITS, PRE-MIX TANK, HAUL 4" DRILL PIPE, MUD CHEMICAL, AND MISCELLANEOUS, WAIT ON DAYLIGHT 100% RIGED DOWN 95% MOVED 60% RIGED UP				
4	5/3/2015	PJSM. FINISH RIGGING UP DERRICK. RAISE DERRICK. RIG UP SOLIDS EQUIPMENT, TANK FARM, AIR, WATER & ELECTRIC LINES, INSTALL & RIG UP TOP DRIVE AND LINE UP TOP DRIVE TRACK, RIG FLOR, CONTINUE WITH GENERAL RIG UP, CELLAR PUMP, PIPE RACKS, CAT WALK ,INSTALL SHAKER SCREENS,LOAD RACKS WITH BHA, PRE-SPUD INSPECTION, RACK BHA, P/U BHA, RIG ON DAY WORK @ 01:00am ON 5/4/2015				
5	5/4/2015	P/U BHA, DRILL, RIG REPAIR (TOP DRIVE LUBE PUMP) FOUND THAT 7 PIN WIRE WAS BAD, SURVEY & CONNECTION				
6	5/5/2015	DRILL, SURVEY & CONNECTION, RIG SERVICE, WIPER TRIP,WORK & BACK REAMTIGHT SPOT F/ 2330 TO 2360 & 2150 & 2065				
7	5/6/2015	DRILL/LOST CIRC BACK REAM OUT 12 STANDS/REGAIN CIRC/R.I.H/RIG SERVICE/CIRC OUT SWEEP/WIPER TRIP/CIRC & SPOT 250 BBLS HI-VIS SWEEP 8% LCM/PULL OUT TO RUN 9 5/8" CASING				
8	5/7/2015	RUN CASING TO 3944, WORK STUCK PIPE AT 3944, PIPE FREE LAY DOWN 5 JOINTS, REGAIN CIRCULATION, VIS UP MUD TO 50 AND CIRCULATE CLEAN HOLE, WASH CASING DOWN F/3,701' TO 3,984', CIRC B/U, R/U HALLIBURTON MIX & PUMP CEMENT, BUMP PLUG FLOATS HELDS, LOST RETURN WITH 405 BBLS OF CEMENT PUMP, WAIT ON CEMENT, RIG UP 200' OF 1" TO PUMP TOP OUT JOB				
9	5/8/2015	TOP JOB 43 BBLS CEMENT, WAIT ON CEMENT, CUT OFF CASING, INSTALL & WELD ON HEAD (TEST TO 1500psi), N/U BOP & TEST, M/U BHA & T.I.H				
10	5/9/2015	DRILL SHOE TRACK & 10' OF NEW FORMATION, SPOT LCM PILL & PERFORM FIT TO 11.5 EMW, 643psi, DRILL, SURVEY & CONNECTION, RIG SERVICE, HAD PARTIAL RETURNS SPOT 100 BBLS 15% LCM, PULL 12 STANDS, CIRCULATE & LIGHT MUD UP WITH 5% LCM				
11	5/10/2015	FINISH MUD UP & TRIP IN HOLE, DRILL, SURVEY & CONNECTION, RIG SERVICE, LOST RETURNS PUMP 2 X 80 BBLS 15% LCM REGAIN RETURNS				
12	5/11/2015	DRILL/RIG SERVICE, SURVEY & CONNECTION, LOST RETURNS PUMP 2 X 80 BBLS OF 15%-20% LCM, PULL 5 STANDS PUMP 2 X 80 BBLS 20%+ LCM, REGAIN RETURNS CIRCULATE @ 244 GPM WITH FULL RETURNS, AND BUILDING MUD VOLUME, TRIP IN HOLE				
13	5/12/2015	DRILL/SURVEY & CONNECTION/RIG SERVICE				
14	5/13/2015	DRILL F/7806 T/7933, LOST CIRCULTION, DRILL F/7933 T/8064. CIRCULTE LCM SWEEP AROUD AND TRIP OUT OF HOLE FOR BIT, CHANGE OUT BHA, TRIP IN TO SHOE, SHANGE OUT SWIVLE PACKING, TRIP IN HOLE. WASH 120' TO BOTTOM. DRILL F/8064 T/8155				
15	5/14/2015	DRILL F/8155' T/8326', LOST CIRCULATION MIX LCM PUMP SWEEPS TO REGAIN CIRCULATION, CONDITION MUD BUILD VOLUME 10% LCM, DRILL F/8326' T/8781, LOST CIRCULATION, PUMPING 15% LCM SWEEPS, PULL 5 STANDS AND BUILD VOLUME REGAIN CIRCULATIPON TRIP BACK TO BOTTOM, DRILL F/8781' T/8801'				
16	5/15/2015	DRILL F/8801' T/ 8991, RIG SERVICE.DRILL F/8991 T/9655				
17	5/16/2015	DRILL F/9655' T/9861, LOST RETURNS SPOT LCM TRIP OUT 5 STANDS RAISE LCM TO 18%, REGAIN REUTRNS CONDITION MUD BUILD VOLUME TRIP BACK TO BOTTOM, DRILL F/9861' T/ 9940. RIG SERVICE. DRILL F/9940 T/10320				
18	5/17/2015	DRILL F/10320' T/10560, ROUTINE RIG SERVICE, DRILL F/10560' T/11143				



Daily Activity and Cost Summary

Well Name: RW 24-14A (GR)

API	Surface Legal Location	Field Name	County	State	Well Configuration Type	
43-047-53307	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical	
Unique Well ID	Ground Elevation (ft)	Casing Flange Elevation (ft)	Current KB to GL (ft)	KB to CF (ft)	Spud Date	Dry Hole TD Date
UT100224	5,269.1	5,269.10	30.00	30.00	4/7/2015 08:00	7/4/2015 01:30
RPT#	Start Date	Summary				
19	5/18/2015	DRILL F/11143' T/KOP @11250', PUMP SWEEP CIRCULATE BOTTOMS UP SPOT 30 BBLS LCM SWEEP PUMP PILL, TRIP OUT FOR KICK OFF ASSEMBLY, CHANGE OUT BHA ORIENT MWD TOOLS, TRIP IN HOLE TO SHOE, CUT DRILLING LINE. TRY TO CALLIBRATE SURVEY CORRECTION TOOL. TRIP IN HOLE				
20	5/19/2015	TRIP IN HOLE WITH CURVE ASSEMBLY, SAFETY WASH 90' TO BOTTOM, DRILL CURVE F/11250' T/11577				
21	5/20/2015	DRILL CURVE F/11577' T/11718', ROUTINE RIG SERVICE, DRILL CURVE F/11718' T/11876				
22	5/21/2015	DRILL CURVE F/11,876' T/11988, SURVEYS AND DOWNLINK TO MWD, DRILL F/11988' T/12020. RIG SERVICE, RELOG GAMMA F/11947 T/12020, DRILL F/12020 T/12080				
23	5/22/2015	DRILL CURVE F/12080' T/12146, CIRCULATE 2 BOTTOMS UP AND PUMP LCM SWEEPS, WIPER TRIP TO SHOE AND BACK TO BOTTOM.				
24	5/23/2015	FINISH WIPER TRIP TO BOTTOM, CIRCULATE 2 BOTTOMS UP WITH LCM SWEEPS, PERFORM WIPER TRIP TO TOP OF KOP AND BACK TO BOTTOM, CIRCULATE BOTTOMS UP AND SPOT WALNUT LUB SWEEP THROUGH THE CURVE, PUMP PILL TRIP OUT 11 STANDS TO TOP OF KOP, RIG UP LAYDOWN TRUCK AND LAYDOWN DRILL PIPE. BIT OUT OF GAUGE. RIG UP FLOOR, LOAD AND STRAP BHA. MAKE UP DIRECTIONAL TOOLS AND TEST. PICK UP 4" DRILL PIPE				
25	5/24/2015	PICK UP 4" DRILL SRTING FILLING PIPE EVERY 3000' TO 11587', REAM OUT OF GAUGE HOLE F/12024 T/12146, CURCULTE BOTTOMS UP, WIPER TRIP TO KOP AND BACK TO BOTTOM.WASH 105' TO BOTTOM.CIRCULTE 2 LCM SWEEPS AND SPOT 40 BBL LUBE SWEEP ON BOTTOM, TRIP OUT OF HOLE FOR CASING				
26	5/25/2015	TRIP OUT OF HOLE FOR CASING LAYDOWN DRIECTIONAL TOOLS, HELD PJSА AND RIG UP WEATHERFORD CASING CREW AND LAYDOWN TRUCK, RUN 7" INTERMEDIATE CASING, LOST RETURNS @ 6025'				
27	5/26/2015	RUN 7" CASING TO 12136', CIRCULTE AND CONDITON HOLE FOR CEMENT, PUMP CEMENT. RIG DOWN AND SET PACKOFF. TEST BOP TO 5000 PSI. SET WEAR BUSHING,CUT DRILLING LINE AND CLEAN MUD TANKS				
28	5/27/2015	FINISH CLEANING MUD TANKS, PU DIR TOOLS, TRIP IN, TRIP OUT FOR MWD, TRIP IN, DRILL SHOE TRACK, FIT, DRILL				
29	5/28/2015	DRILLING, SURVEYS & CONNECTIONS, RIG SERVICE, TRIP FOR BIT				
30	5/29/2015	TRIP OUT FOR BIT, RUN CBL, M/U DIR. BHA, TRIP IN HOLE, CIRCULATE BOTTOMS UP, CHANGE OUT ROT. HEAD, WASH TO BOTTOM, DRILLING				
31	5/30/2015	DRILLING, SERVICE RIG, TRIP OUT FOR BIT, C/O DIR. BHA, TRIP IN HOLE				
32	5/31/2015	FINISH TRIP IN HOLE, CIRCULATE GAS OUT ON CHOKE, DRILL, SURVEYS & CONNECTIONS, RIG SERVICE, SPOT ECD PILL, TRIP OUT FOR BIT				
33	6/1/2015	FINISH TRIP OUT FOR BIT, CHANGE OUT DIR. TOOLS, TRIP IN HOLE, SLIP & CUT DRILL LINE, DRILL & SURVEYS & CONNECTIONS				
34	6/2/2015	DRILLING, TRIP OUT FOR MOTOR, CHANGE OUT DIR. TOOLS, TRIP IN HOLE, CIRCULATE GAS OUT, DRILLING				
35	6/3/2015	DRILLING, RIG SERVICE, SURVEYS & CONNECTIONS				
36	6/4/2015	DRILLING, TRIP FOR BIT, RIG SERVICE, SURVEYS & CONNECTIONS				
37	6/5/2015	DRILLING, TRIP FOR BIT, RIG SERVICE, SURVEYS & CONNECTIONS				
38	6/6/2015	DRILLING TRIP FOR MOTOR, SURVEYS & CONNECTIONS, RIG SERVICE				
39	6/7/2015	TRIP IN HOLE, SLIP & CUT DRILL LINE, WASH TO BOTTOM, CIRCULATE GAS OUT, DRILLING, SERVICE RIG, SURVEYS & CONNECTIONS				
40	6/8/2015	DRILLING, TRIP FOR BIT & MOTOR, WASH & REAM TO BOTTOM, DRILLING				
41	6/9/2015	DRILLING, RIG SERVICE, SURVEYS & CONNECTIONS, TRIP OUT FOR BIT & MOTOR				
42	6/10/2015	CHANGE OUT DIRECTIONAL TOOLS, BIT AND MOTOR., TRIP IN HOLE. SAFETY WASH 120' TO BOTTOM, CIRCULTE GAS OUT OF HOLE AND BREAK IN BIT. DRILL F/14400 T/14471 CONNECTIONS AND SURVEYS				
43	6/11/2015	DRILL F/14471 T/14474.LOST DIFF. PSI, CIRCULTE BOTTOMS UP, TRIP OUT OF HOLE FOR MOTOR. CHANGE BIT, MOTOR, ORIENT MWD TOOL, TRIP IN TO SHOE, SLIP AND CUT DRILL LINE, TRIP IN HOLE TO 14370', SAFETY WASH TO BOTTOM, CIRCULATE OUT TRIP GAS ON CHOKE, DRILL F/14474' T/, SURVEYS AND CONNECTIONS				
44	6/12/2015	DRILL F/14500 T/14558, RIG SERVICE. DRILL F/14558 T/14647 CONNECTIONS AND SURVEYS				
45	6/13/2015	DRILL F/14647 T/14653, RIG SERVICE, DRILL F/14653 T/14690, CIRCULTE BOTTOMS UP AND TRIP OUT OF HOLE FOR BIT, CHANGE OUT BIT MOTOR AND ORIENT MWD TOOL, TRIP IN HOLE SAFETY WASH 130' TO BOTTOM,				
46	6/14/2015	CIRCULTE GAS OUT OF HOLE AND BREAK IN BIT. DRILL F/14690 T/14745, RIG SERVICE. DRILL F/14745 T/14835, SURVEYS AND CONNECTIONS				
47	6/15/2015	DRILL F/14835 T/14842', ROUTINE RIG SERVICE, DRILL F/14842' T/14934', SURVEYS AND CONNECTIONS, PUMP PILL TRIP OUT FOR BIT AND MOTOR,				



Daily Activity and Cost Summary

Well Name: RW 24-14A (GR)

API	Surface Legal Location	Field Name	County	State	Well Configuration Type	
43-047-53307	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical	
Unique Well ID	Ground Elevation (ft)	Casing Flange Elevation (ft)	Current KB to GL (ft)	KB to CF (ft)	Spud Date	Dry Hole TD Date
UT100224	5,269.1	5,269.10	30.00	30.00	4/7/2015 08:00	7/4/2015 01:30
RPT #	Start Date	Summary				
48	6/16/2015	FINISH TRIP OUT OF HOLE, CHANGE OUT BHS. TRIP IN HOLE, SAFETY WASH 95' TO BOTTOM, CIRCULATE OUT GAS AND BREAK IN BIT, DRILL F/14934' T/14954', RIG SERVICE, DRILL F/14954' T/15014, CONNECTIONS AND SURVEYS, PUMP PILL TRIP OUT FOR BIT AND MOTOR				
49	6/17/2015	TRIP OUT OF HOLE FOR BIT. CHAHGE OUT BHA. TRIP IN HOLE TO SHOE, ADJUST BRAKES AND RIG SERVICE, TRIP IN HOLE T/14914', SAFETY REAM TO BOTTOM UNDER GAGE F/15000' T/15014', DRILL F/15014' T/15078', CONNECTIONS AND SURVEYS				
50	6/18/2015	DRILL F/15078 T/15121, CHANGE OUT SAVER SUB, DRILL F/15121' T/15135', ROUTINE RIG SERVICE, DRILL F/15135' T/15166', CHANGE OUT SAVER SUB, DRILL F/15166' T/15192, CONNECTIONS				
51	6/19/2015	DRILL F/15192 T/15227', CHANGE OUT SAVER SUB, ROUTINE RIG SERVICE, DRILL F/15227' T/15386, CHANGE OUT SAVER SUB, DRILL F/15386 T/15400' CONNECTIONS AND SURVEYS				
52	6/20/2015	DRILL F/15400' T/15535', CHANGE OUT SAVER SUB, CONNECTIONS AND SURVEYS, DRILL F/15535' T/15608, CONNECTIONS AND SURVEYS				
53	6/21/2015	DRILL F/15608 T/15609. CIRCULATE BOTTOMS UP, TRIP OUT FOR BIT, CHANGE OUT BIT MOTOR, MONELS AND DRILL REAM ORIENT MWD TOOL, TRIP IN HOLE TO SHOE @12082', CHANGE SWIVEL PACKING AND SAVER SUB, TRIP IN HOLE TO 15480', REAM F/15480' T/15609' PARTIAL PACKING OFF CIRCULATE OUT TRIP GAS, DRILL F/15609' T/15624				
54	6/22/2015	DRILL F/15624 T/15762' TROUBLE SHOOT MWD & PRESSURE PROBLEM, TRIP OUT WET PUMP SECOND PILL DISPLACE PILL TO BACK SIDE FOR ECD, CHANGE BIT, MOTOR, AND OREINT MWD, TRIP IN HOLE				
55	6/23/2015	ROUTINE RIG SERVICE, TRIP IN HOLE WITH BIT #21, WASH 180' TO BOTTOM, DRILL F/15762'				
56	6/24/2015	DRILL, SURVEY & CONNECTION, TROUBLE SHOOT MWD (NO PULSE), CIRCULATE B/U, PULL OUT HOLE, TEST BOP,				
57	6/25/2015	FINISH TESTING BOP, INSTALL WEAR BUSHING, MAKE UP DIR. TOOLS & SCRIBE, TRIP IN HOLE TO SHOE, SLIP & CUT DRILL LINE, SERVICE RIG & TOP DRIVE, TRIP IN HOLE TO 15,763, WASH & REAM 128' TO BOTTOM FOR SAFETY, CHANGE OUT ROT RUBBER, DRILL AHEAD, SURVEY & CONNECTION				
58	6/26/2015	SERVICE RIG & TOP DRIVE, DRILL, SURVEY & CONNECTION				
59	6/27/2015	SERVICE RIG & TOP DRIVE, DRILL, SURVEY & CONNECTION, 10 STANDS WIPER TRIP				
60	6/28/2015	SERVICE RIG & TOP DRIVE, DRILL, CIRCULATE HOLE CLEAN, TRIP OUT FOR MOTOR FAILURE, L/D NATIVES DIRECTIONAL TOOLS AND RELEASE NATIVE, PJSM WITH SCIENTIFIC, P/U DIRECTIONAL TOOLS & SCRIBE, TRIP IN HOLE FILLING EVERY 35 STANDS & TEST MWD TOOL.				
61	6/29/2015	SERVICE RIG & TOP DRIVE, FINISH TRIP IN HOLE, WASH & REAM 211' TO BOTTOM & OVER LAP GAMMA, CHANGE OUT SAVER SUB ON TOP DRIVE, DRILL, SURVEY & CONNECTION				
62	6/30/2015	SERVICE RIG & TOP DRIVE, DRILL, SURVEY & CONNECTION, CIRC BOTTOM UP, TRIP OUT FOR BIT & MOTOR, RE-MOVE HIGH CLUTCH CHAIN FROM DRAWWORK, CONTINUE TRIP OUT HOLE, CHANGE OUT BIT, MUD MOTOR, MWD TOOLS CHECK OLD SCRIBE OK & RE-SCRIBE, TRIP IN HOLE TO 2,950' FILL PIPE TEST MWD TOOL, INSTALL HIGH CLUTCH CHAIN ON DRAWWORK				
63	7/1/2015	RIG REPAIR (INSTALL NEW HIGH DRUM CHAIN, SLIP & CUT DRILL LINE, TRIP IN HOLE TO 16,238, SERVICE RIG & TOP DRIVE, REAM TO BOTTOM & OVER LAP GAMMA, DRILL, SURVEYS & CONNECTIONS				
64	7/2/2015	SERVICE RIG & TOP DRIVE, DRILL, SURVEY & CONNECTION, TRIP OUT FOR BIT & MOTOR, L/D SCIENTIFIC DIRECTIONAL TOOLS AND RELEASE SCIENTIFIC, M/U BIT, MUD MOTOR, 2 JTS. DRILL PIPE DRILL-N-REAMER, TRIP IN HOLE, WASH & REAM SAFETY F/16,395 TO 16,493 CHANGE OUT ROT RUBBER				
65	7/3/2015	DRILLING, RIG SERVICE, SURVEYS & CONNECTIONS, PUMP WEIGHTED SWEEP WITH CALCIUM CARBONATE, 50 STANDS WIPER TRIP, TRIP IN HOLE W/ HWDP TIGHTEN UP EVERY BRAKE.				
66	7/4/2015	FINISH TRIP IN HOLE (REAM TIGHT HOLE @ 15,950 15,976, PUMP SWEEP, CIRCULATE OUT, PUMP & SPOT BEADS, WIPER TRIP TO 15,700 (TIGHT HOLE @ 15,832 & 16,032, PUMP SWEEP, CIRCULATE OUT & PUMP SLUG, TRIP OUT FOR REAMER RUN (TIGHT HOLE @ 16013, 15941, 15831), L/D BIT, MUD MOTOR, REAMER AND RE-MOVE BOTTOM PART OF THE ROT RUBBER, M/U REAMING ASSY BIT, BIT SUB W/FLOAT, 1 JT. HWDP, D-N-R, 1 JT. HWDP, D-NR, , TRIP IN HOLE FILL EVERY 35 STANDS TO 12,058', SLIP & CUT DRILL LINE, PUMP 35 BBLs WEIGHTED CAL CARBONATE SWEEP & CIRCULATE OUT				
67	7/5/2015	SERVICE RIG & TOP DRIVE, REAM, CHANGE OUT SAVER SUB ON TOP DRIVE, PUMP 35 BBLs WEIGHTED CAL CARBONATE SWEEP & CIRCULATE OUT, BACK REAMING HIGH TORQUE AREAS 15,212 TO 15,253 & 15,561 TO 15,611 & 15,660 TO 15,669 & 15,960 TO 15,966				
68	7/6/2015	CIRCULATE OUT SWEEP & PUMP SLUG, WIPER TRIP TO 12,135, PUMP SWEEP, CIRCULATE OUT, PUMP & SPOT BEADS, PUMP SLUG & TRIP OUT TO 12,100, SPOT 50bbls 16# MUD, TRIP OUT TO RUN 4 1/2" PRODUCTION CASING, L/D D-N-R, 2 JTS. HWDP, BIT SUB, BIT, PJSM W/ RIG CREW, US THREAD REP., WEATHERFORD AND HOWCO, RIG UP, M/U FLOAT SHOE, ONE JT. 2X FLOAT COLLARS, RSI, ONE JT. PUMP THROUGH FLOAT OK RUN 4 1/2" CASING. FILL LINER WITH 2% FILTERED SUBSTITE WATER,				
69	7/7/2015	CONTINUE TO RUN 4 1/2" PRODUCTION LINER, M/U LINER HANGER PUMP 2 BBLs THRU FLOATS, MAKE UP VERSA FLEX HANGER & RUNNING TOOL, RIG DOWN CASING CREW, PJSM, TRIP IN HOLE WITH PRODUCTION LINER, RIG SERVICE, TRIP IN HOLE WITH LINER ON 4" DRILL PIPE, SET LINER, TEST BACK, TO 4000 PSI, DISPLACE HOLE WITH 2% KCL WITH HOWCO, PUMPING 0.3BBL/MIN WITH 2050 PSI				



Daily Activity and Cost Summary

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30

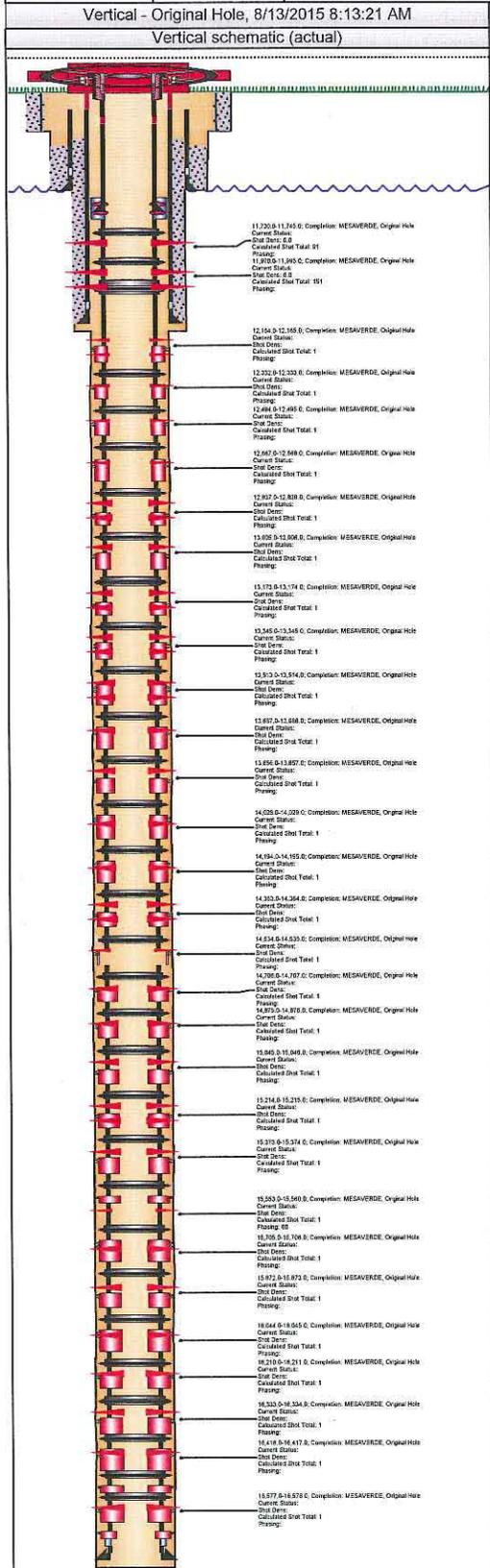
RPT #	Start Date	Summary
70	7/8/2015	DISPLACE OBM FROM HOLE WITH 2% CLAYFIX WATER, FLOW CHECK WELL, RIG DOWN HALLIBURTON, HELD PJSA RIG UP LAYDOWN TRUCK, LAYDOWN 4" DRILL STRING,
71	7/9/2015	LAYDOWN 4" DRILL STRING AND LINER HANGER RUNNTING TOOL, PULL WEAR BUSHING, HELD PJSA AND RIG WEATHERFORD CASING EQUIPMENT, RUN 4 1/2" TIEBACK STRING, CIRCULTE 238 BBLs CLAY WEB WATER. SPACE OUT AND LAND TIE BACK STRING AND TEST. SET PACK OFF ASSEMBLY AND TEST TO 4000 PSI. INSTALL BPV.NIPPLE DOWN BOP AND INSTALL NIGHT CAP.



Perforations

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Gr Elev (ft) 5,269.1	Current Elevation 5,299.10, SST 88 - KB 30	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30	Total Depth (All) (ft, KB) Original Hole - 16,673.0



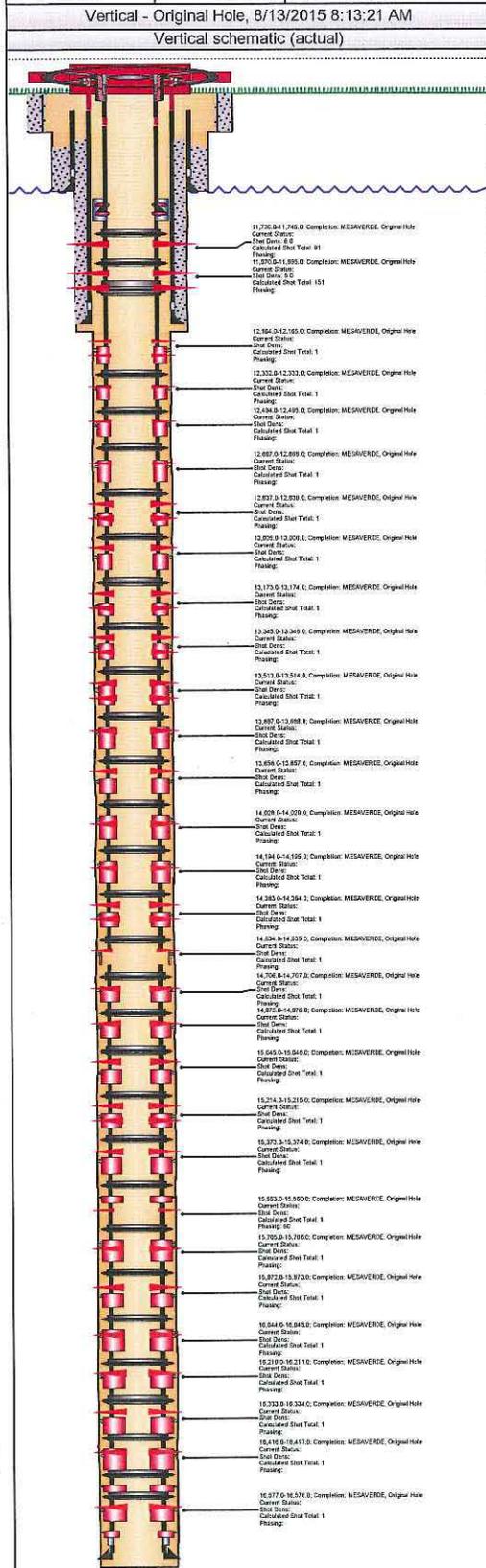
Perforations							
Date	7/27/2015	Completion	MESAVERDE, Original Hole	Top Depth (ft, KB)	11,730.0	Bottom Depth (ft, KB)	11,745.0
Perforation Company	Cutters Wireline	Conveyance Method	Wireline	Gun Size (in)	3 1/8	Carrier Make	
Shot Density (shots/ft)	6.0	Charge Type		Phasing (°)			
Orientation				Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log							
Calculated Shot Total							91
Perforation Statuses							
Date	Status	Com					
Date	7/27/2015	Completion	MESAVERDE, Original Hole	Top Depth (ft, KB)	11,970.0	Bottom Depth (ft, KB)	11,995.0
Perforation Company	Cutters Wireline	Conveyance Method	Wireline	Gun Size (in)	3 1/8	Carrier Make	
Shot Density (shots/ft)	6.0	Charge Type		Phasing (°)			
Orientation				Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log							
Calculated Shot Total							151
Perforation Statuses							
Date	Status	Com					
Date	7/27/2015	Completion	MESAVERDE, Original Hole	Top Depth (ft, KB)	12,164.0	Bottom Depth (ft, KB)	12,165.0
Perforation Company	Cutters Wireline	Conveyance Method	Wireline	Gun Size (in)		Carrier Make	
Shot Density (shots/ft)		Charge Type		Phasing (°)			
Orientation				Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log							
Calculated Shot Total							1
Perforation Statuses							
Date	Status	Com					
Date	7/26/2015	Completion	MESAVERDE, Original Hole	Top Depth (ft, KB)	12,332.0	Bottom Depth (ft, KB)	12,333.0
Perforation Company	Cutters Wireline	Conveyance Method	Wireline	Gun Size (in)		Carrier Make	
Shot Density (shots/ft)		Charge Type		Phasing (°)			
Orientation				Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)		
Reference Log							
Calculated Shot Total							1
Perforation Statuses							
Date	Status	Com					



Perforations

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT100224	Gr Elev (ft) 5,269.1	Current Elevation 5,299.10, SST 88 - KB 30	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
Total Depth (All) (ft, KB) Original Hole - 16,673.0					



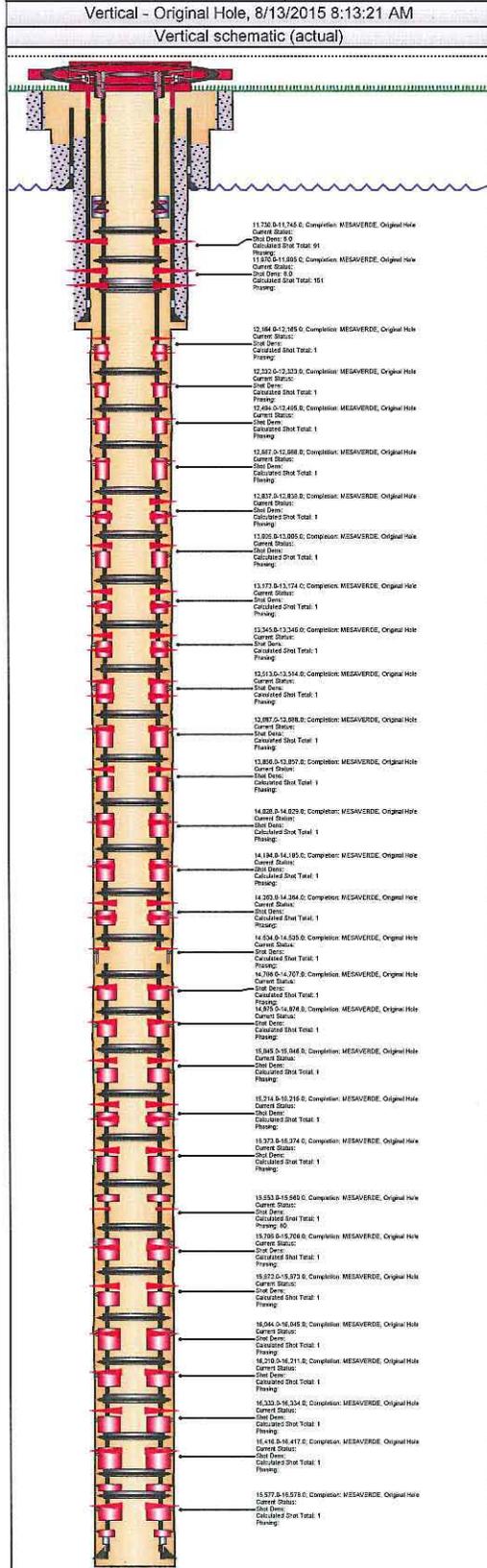
Perforation Statuses					
Date	Status	Com			
7/26/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		12,494.0	12,495.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (*)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/26/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		12,667.0	12,668.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (*)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/26/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		12,837.0	12,838.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (*)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/26/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		13,005.0	13,006.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (*)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					



Perforations

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT100224	Gr Elev (ft) 5,269.1	Current Elevation 5,299.10, SST 88 - KB 30	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
Vertical - Original Hole, 8/13/2015 8:13:21 AM			Perforation Statuses		
Vertical schematic (actual)			Date	Status	Com



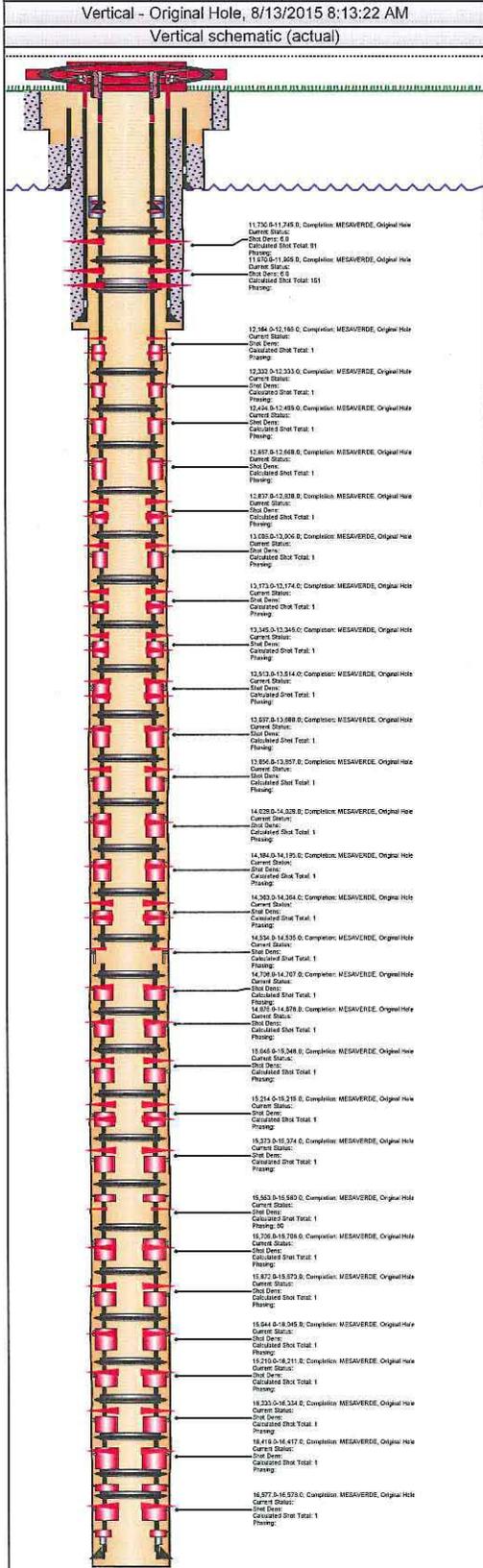
Date	Status	Com			
7/26/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	13,173.0	Bottom Depth (ft, KB)	13,174.0
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	13,345.0	Bottom Depth (ft, KB)	13,346.0
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	13,513.0	Bottom Depth (ft, KB)	13,514.0
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	13,687.0	Bottom Depth (ft, KB)	13,688.0
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					



Perforations

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT100224	Gr Elev (ft) 5,269.1	Current Elevation 5,299.10, SST 88 - KB 30	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
Total Depth (All) (ft, KB) Original Hole - 16,673.0					



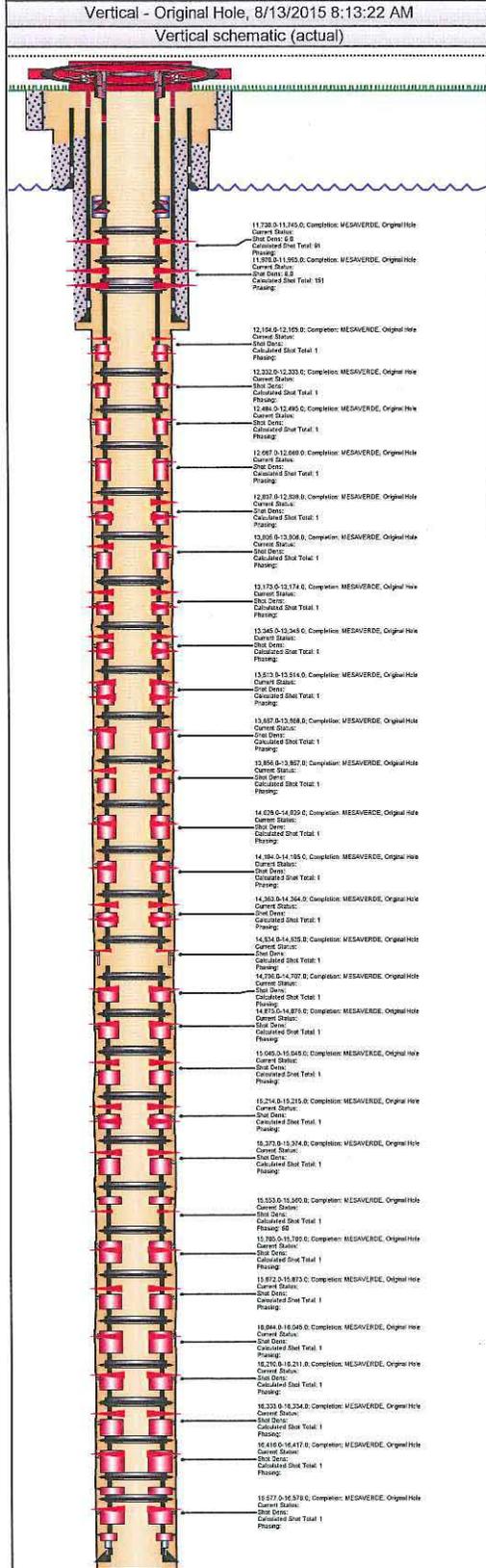
Perforation Statuses					
Date	Status	Com			
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		13,856.0	13,857.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		14,028.0	14,029.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		14,194.0	14,195.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		14,363.0	14,364.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB)	Bottom Depth (ft, KB)		
		15,046.0	15,047.0		
Perforation Company		Conveyance Method		Gun Size (in)	Carrier Make
Shot Density (shots/ft)		Charge Type		Phasing (°)	
Orientation			Orientation Method		
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					



Perforations

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT100224	Gr Elev (ft) 5,269.1	Current Elevation 5,299.10, SST 88 - KB 30	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
Total Depth (All) (ft, KB) Original Hole - 16,673.0					



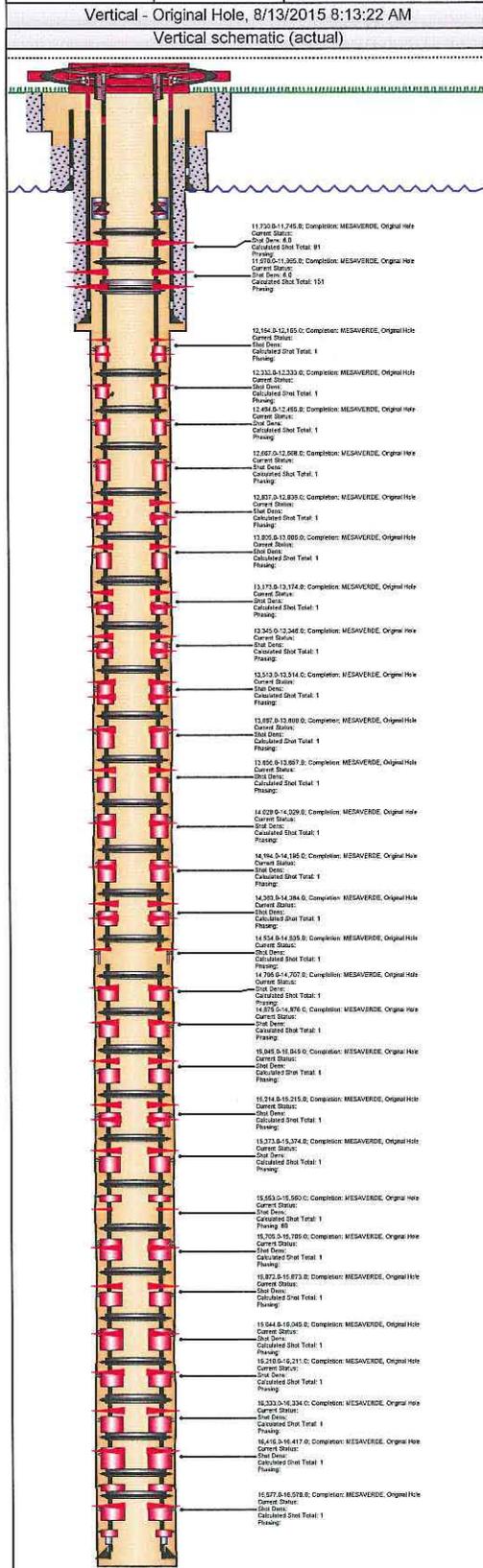
Perforation Statuses					
Date	Status	Com			
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB) 14,534.0	Bottom Depth (ft, KB) 14,535.0		
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/25/2015	MESAVERDE, Original Hole	Top Depth (ft, KB) 14,706.0	Bottom Depth (ft, KB) 14,707.0		
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/24/2015	MESAVERDE, Original Hole	Top Depth (ft, KB) 14,875.0	Bottom Depth (ft, KB) 14,876.0		
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/24/2015	MESAVERDE, Original Hole	Top Depth (ft, KB) 15,045.0	Bottom Depth (ft, KB) 15,046.0		
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					



Perforations

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT100224	Gr Elev (ft) 5,269.1	Current Elevation 5,299.10, SST 88 - KB 30	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
Vertical - Original Hole, 8/13/2015 8:13:22 AM			Total Depth (All) (ft, KB) Original Hole - 16,673.0		



Perforation Statuses					
Date	Status	Com			
7/22/2015	MESAVERDE, Original Hole	Top Depth (ft, KB) 15,872.0	Bottom Depth (ft, KB) 15,873.0		
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/21/2015	MESAVERDE, Original Hole	Top Depth (ft, KB) 16,044.0	Bottom Depth (ft, KB) 16,045.0		
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/21/2015	MESAVERDE, Original Hole	Top Depth (ft, KB) 16,210.0	Bottom Depth (ft, KB) 16,211.0		
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					
Perforation Statuses					
Date	Status	Com			
7/21/2015	MESAVERDE, Original Hole	Top Depth (ft, KB) 16,333.0	Bottom Depth (ft, KB) 16,334.0		
Perforation Company		Conveyance Method	Gun Size (in)	Carrier Make	
Shot Density (shots/ft)		Charge Type	Phasing (°)		
Orientation		Orientation Method			
Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)
Reference Log					
Calculated Shot Total					
1					

RW 24-14A (GR)

Sundry Number : 65680 API Well Number : 43047533070000

AFE - DRL-TU (Tube Up), <dtmstart>								
Well Name RW 24-14A (GR)		Primary Job Type AFE - DRL-TU (Tube Up)		Secondary Job Type	Objective	Start Date		Job End Date
AFE - DRL-AL (Artificial Lift), <dtmstart>								
Well Name RW 24-14A (GR)		Primary Job Type AFE - DRL-AL (Artificial Lift)		Secondary Job Type	Objective	Start Date		Job End Date
AFE - DRL-CT (Completion), 6/8/2015 06:00								
Well Name RW 24-14A (GR)		Primary Job Type AFE - DRL-CT (Completion)		Secondary Job Type	Objective	Start Date 6/8/2015		Job End Date 7/29/2015
RPT #	End Date	Cum Time Log (days)	Current Ops	Summary	Time Log Hrs (hr)	syscreateuser		
1	4/8/2015 06:00	0.42	PRE SPUD COSTS		10.00	10446		
1	5/1/2015 06:00	0.50	WAIT ON DAY LIGHT	WAIT ON DAY LIGHT	12.00	rwrig6		
2	5/2/2015 06:00	1.50	WAIT ON DAY LIGHT	FINISH RIGGING DOWN DERRICK,SUBS, MUD TANKS, MATS, SKID RAILS, AND BACK YARD ON OLD LOCATION, MOVE TO NEW LOCATION AND SET MUD TANKS, PUMPS, SCR, GEN PACK, SUB MATS, SKID RAILS, SUBS AT 09:05 AM WESTROC TRUCK WAS UNLOADING MUD TANK AND BACK INTO MOTOR RADIATOR, MOVE HOUSES AND RIG UP 90% RIGED DOWN 85% MOVED 30% RIGED UP	24.00	rwrig6		
3	5/3/2015 06:00	2.50	WAIT ON DAY LIGHT	SET SUBS, DRAWWORK, ROTARY, SPREADERS BEAMS, THREE HOUSES ON RIG FLOOR, PIN DERRICK ON RIG FLOOR, STRING UP, DRAG LINK, RUNNING POWER CABLES, GAS BUSTER, R/U MUD PITS, PRE-MIX TANK, HAUL 4" DRILL PIPE, MUD CHEMICAL, AND MISCELLANEOUS, WAIT ON DAYLIGHT 100% RIGED DOWN 95% MOVED 60% RIGED UP	24.00	rwrig6		
4	5/4/2015 06:00	3.50	P/U 3 DRILL COLLAR	PJSM. FINISH RIGGING UP DERRICK. RAISE DERRICK. RIG UP SOLIDS EQUIPMENT, TANK FARM, AIR, WATER & ELECTRIC LINES, INSTALL & RIG UP TOP DRIVE AND LINE UP TOP DRIVE TRACK, RIG FLOR, CONTINUE WITH GENERAL RIG UP, CELLAR PUMP, PIPE RACKS, CAT WALK ,INSTALL SHAKER SCREENS,LOAD RACKS WITH BHA, PRE-SPUD INSPECTION, RACK BHA, P/U BHA, RIG ON DAY WORK @ 01:00am ON 5/4/2015	24.00	rwrig6		
5	5/5/2015 06:00	4.50	DRILLING SURFACE	P/U BHA, DRILL, RIG REPAIR (TOP DRIVE LUBE PUMP) FOUND THAT 7 PIN WIRE WAS BAD, SURVEY & CONNECTION	24.00	rwrig6		
6	5/6/2015 06:00	5.50	DRILLING	DRILL, SURVEY & CONNECTION, RIG SERVICE, WIPER TRIP,WORK & BACK REAMTIGHT SPOT F/ 2330 TO 2360 & 2150 & 2065	24.00	rwrig6		
7	5/7/2015 06:00	6.50	L/D MUD MOTOR	DRILL/LOST CIRC BACK REAM OUT 12 STANDS/REGAIN CIRC/R.I.H/RIG SERVICE/CIRC OUT SWEEP/WIPER TRIP/CIRC & SPOT 250 BBLs HI-VIS SWEEP 8% LCM/PULL OUT TO RUN 9 5/8" CASING	24.00	rwrig6		

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8	5/8/2015 06:00	7.50	WAIT ON CEMENT FOR TOP JOB CEMENT	RUN CASING TO 3944, WORK STUCK PIPE AT 3944, PIPE FREE LAY DOWN 5 JOINTS, REGAIN CIRCULATION, VIS UP MUD TO 50 AND CIRCULATE CLEAN HOLE, WASH CASING DOWN F/3,701' TO 3,984', CIRC B/U, R/U HALLIBURTON MIX & PUMP CEMENT, BUMP PLUG FLOATS HELDS, LOST RETURN WITH 405 BBLS OF CEMENT PUMP, WAIT ON CEMENT, RIG UP 200' OF 1" TO PUMP TOP OUT JOB	24.00	rwrig6
9	5/9/2015 06:00	8.50	DRILLING FLOAT EQUIPMENT	TOP JOB 43 BBLS CEMENT, WAIT ON CEMENT, CUT OFF CASING, INSTALL & WELD ON HEAD (TEST TO 1500psi), N/U BOP & TEST, M/U BHA & T.I.H	24.00	rwrig6
10	5/10/2015 06:00	9.50	LIGHT MUD UP WITH 5% LCM	DRILL SHOE TRACK & 10' OF NEW FORMATION, SPOT LCM PILL & PERFORM FIT TO 11.5 EMW, 643psi, DRILL, SURVEY & CONNECTION, RIG SERVICE, HAD PARTIAL RETURNS SPOT 100 BBLS 15% LCM, PULL 12 STANDS, CIRCULATE & LIGHT MUD UP WITH 5% LCM	24.00	rwrig6
11	5/11/2015 06:00	10.50	DRILLING	FINISH MUD UP & TRIP IN HOLE, DRILL, SURVEY & CONNECTION, RIG SERVICE, LOST RETURNS PUMP 2 X 80 BBLS 15% LCM REGAIN RETURNS	24.00	rwrig6
12	5/12/2015 06:00	11.50	DRILLING	DRILL/RIG SERVICE, SURVEY & CONNECTION, LOST RETURNS PUMP 2 X 80 BBLS OF 15%-20% LCM, PULL 5 STANDS PUMP 2 X 80 BBLS 20%+ LCM, REGAIN RETURNS CIRCULATE @ 244 GPM WITH FULL RETURNS, AND BUILDING MUD VOLUME, TRIP IN HOLE	24.00	rwrig6
13	5/13/2015 06:00	12.50	DRILLING	DRILL/SURVEY & CONNECTION/RIG SERVICE	24.00	rwrig6
14	5/14/2015 06:00	13.50	DRILL 8 3/4" INTERMEDIATE HOLE	DRILL F/7806 T/7933, LOST CIRCULTION, DRILL F/7933 T/8064. CIRCULTE LCM SWEEP AROUD AND TRIP OUT OF HOLE FOR BIT, CHANGE OUT BHA, TRIP IN TO SHOE, SHANGE OUT SWIVLE PACKING, TRIP IN HOLE. WASH 120' TO BOTTOM. DRILL F/8064 T/8155	24.00	rwrig6
15	5/15/2015 06:00	14.50	DRILL 8 3/4" INTERMEDIATE HOLE	DRILL F/8155' T/8326', LOST CIRCULATION MIX LCM PUMP SWEEPS TO REGAIN CIRCULATION, CONDITION MUD BUILD VOLUME 10% LCM, DRILL F/8326' T/8781, LOST CIRCULATION, PUMPING 15% LCM SWEEPS, PULL 5 STANDS AND BUILD VOLUME REGAIN CIRCULATIPON TRIP BACK TO BOTTOM, DRILL F/8781' T/8801'	24.00	rwrig6
1	5/15/2015 06:00			CONTRACT WORK		50170
16	5/16/2015 06:00	15.50	DRILL 8 3/4" INTERMEDIATE HOLE	DRILL F/8801' T/ 8991, RIG SERVICE.DRILL F/8991 T/9655	24.00	rwrig6
17	5/17/2015 06:00	16.50	DRILL 8 3/4" INTERMEDIATE HOLE	DRILL F/9655' T/9861, LOST RETURNS SPOT LCM TRIP OUT 5 STANDS RAISE LCM TO 18%, REGAIN REUTRNS CONDITION MUD BUILD VOLUME TRIP BACK TO BOTTOM, DRILL F/9861' T/ 9940. RIG SERVICE. DRILL F/9940 T/10320	24.00	rwrig6
18	5/18/2015 06:00	17.50	DRILL 8 3/4" INTERMEDIATE HOLE	DRILL F/10320' T/10560, ROUTINE RIG SERVICE, DRILL F/10560' T/11143	24.00	rwrig6
19	5/19/2015 06:00	18.50	TRIP IN HOLE	DRILL F/11143' T/KOP @11250', PUMP SWEEP CIRCULATE BOTTOMS UP SPOT 30 BBLS LCM SWEEP PUMP PILL, TRIP OUT FOR KICK OFF ASSEMBLY, CHANGE OUT BHA ORIENT MWD TOOLS,TRIP IN HOLE TO SHOE, CUT DRILLING LINE. TRY TO CALLIBRATE SURVEY CORRECTION TOOL. TRIP IN HOLE	24.00	rwrig6
20	5/20/2015 06:00	19.50	DRILL 8 3/4" BUILD SECTION	TRIP IN HOLE WITH CURVE ASSEMBLY, SAFETY WASH 90' TO BOTTOM, DRILL CURVE F/11250' T/11577	24.00	rwrig6

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21	5/21/2015 06:00	20.50	DRILL 8 3/4" BUILD SECTION	DRILL CURVE F/11577' T/11718', ROUTINE RIG SERVICE, DRILL CURVE F/11718' T/11876	24.00	rwrig6
22	5/22/2015 06:00	21.50	DRILL 8 3/4" BUILD SECTION	DRILL CURVE F/11,876' T/11988, SURVEYS AND DOWNLINK TO MWD, DRILL F/11988' T/12020. RIG SERVICE, RELOG GAMMA F/11947 T/12020, DRILL F/12020 T/12080	24.00	rwrig6
23	5/23/2015 06:00	22.50	WASH AND REAM TO BOTTOM	DRILL CURVE F/12080' T/12146, CIRCULATE 2 BOTTOMS UP AND PUMP LCM SWEEPS, WIPER TRIP TO SHOE AND BACK TO BOTTOM.	24.00	rwrig6
24	5/24/2015 06:00	23.50	PICKING UP 4" DRILL PIPE	FINISH WIPER TRIP TO BOTTOM, CIRCULATE 2 BOTTOMS UP WITH LCM SWEEPS, PERFORM WIPER TRIP TO TOP OF KOP AND BACK TO BOTTOM, CIRCULATE BOTTOMS UP AND SPOT WALNUT LUB SWEEP THROUGH THE CURVE, PUMP PILL TRIP OUT 11 STANDS TO TOP OF KOP, RIG UP LAYDOWN TRUCK AND LAYDOWN DRILL PIPE. BIT OUT OF GAUGE. RIG UP FLOOR, LOAD AND STRAP BHA. MAKE UP DIRECTIONAL TOOLS AND TEST. PICK UP 4" DRILL PIPE	24.00	rwrig6
25	5/25/2015 06:00	24.50	TRIP OUT FOR CASING	PICK UP 4" DRILL SRTING FILLING PIPE EVERY 3000' TO 11587', REAM OUT OF GAUGE HOLE F/12024 T/12146, CURCULTE BOTTOMS UP, WIPER TRIP TO KOP AND BACK TO BOTTOM.WASH 105' TO BOTTOM.CIRCULTE 2 LCM SWEEPS AND SPOT 40 BBL LUBE SWEEP ON BOTTOM, TRIP OUT OF HOLE FOR CASING	24.00	rwrig6
26	5/26/2015 06:00	25.50	RUNNING 7" CASING	TRIP OUT OF HOLE FOR CASING LAYDOWN DRIECTIONAL TOOLS, HELD P.J.S.A AND RIG UP WEATHERFORD CASING CREW AND LAYDOWN TRUCK, RUN 7" INTERMEDIATE CASING, LOST RETURNS @ 6025'	24.00	rwrig6
27	5/27/2015 06:00	26.50	CLEANING MUD TANKS	RUN 7" CASING TO 12136', CIRCULTE AND CONDITON HOLE FOR CEMENT, PUMP CEMENT. RIG DOWN AND SET PACKOFF. TEST BOP TO 5000 PSI. SET WEAR BUSHING,CUT DRILLING LINE AND CLEAN MUD TANKS	24.00	rwrig6
28	5/28/2015 06:00	27.50	DRILLING 6 1/8" PRODUCTION	FINISH CLEANING MUD TANKS, PU DIR TOOLS, TRIP IN, TRIP OUT FOR MWD, TRIP IN, DRILL SHOE TRACK, FIT, DRILL	24.00	rwrig6
29	5/29/2015 06:00	28.50	TRIP FOR BIT	DRILLING, SURVEYS & CONNECTIONS, RIG SERVICE, TRIP FOR BIT	24.00	rwrig6
30	5/30/2015 06:00	29.50	DRILLING 6 1/8" PRODUCTION	TRIP OUT FOR BIT, RUN CBL, M/U DIR. BHA, TRIP IN HOLE, CIRCULATE BOTTOMS UP, CHANGE OUT ROT. HEAD, WASH TO BOTTOM, DRILLING	24.00	rwrig6
31	5/31/2015 06:00	30.50	TRIP IN HOLE	DRILLING, SERVICE RIG, TRIP OUT FOR BIT, C/O DIR. BHA, TRIP IN HOLE	24.00	rwrig6
32	6/1/2015 06:00	31.50	TRIP OUT FOR BIT	FINISH TRIP IN HOLE, CIRCULATE GAS OUT ON CHOKE, DRILL, SURVEYS & CONNECTIONS, RIG SERVICE, SPOT ECD PILL, TRIP OUT FOR BIT	24.00	rwrig6
33	6/2/2015 06:00	32.50	DRILLING 6 1/8" PRODUCTION HOLE	FINISH TRIP OUT FOR BIT, CHANGE OUT DIR. TOOLS, TRIP IN HOLE, SLIP & CUT DRILL LINE, DRILL & SURVEYS & CONNECTIONS	24.00	rwrig6
34	6/3/2015 06:00	33.50	DRILLING 6 1/8" PRODUCTION HOLE	DRILLING, TRIP OUT FOR MOTOR, CHANGE OUT DIR. TOOLS, TRIP IN HOLE, CIRCULATE GAS OUT, DRILLING	24.00	rwrig6
35	6/4/2015 06:00	34.50	DRILLING 6 1/8" PRODUCTION HOLE	DRILLING, RIG SERVICE, SURVEYS & CONNECTIONS	24.00	rwrig6
36	6/5/2015 06:00	35.50	DRILLING 6 1/8" PRODUCTION HOLE	DRILLING, TRIP FOR BIT, RIG SERVICE, SURVEYS & CONNECTIONS	24.00	rwrig6
37	6/6/2015 06:00	36.50	DRILLING 6 1/8" PRODUCTION HOLE	DRILLING, TRIP FOR BIT, RIG SERVICE, SURVEYS & CONNECTIONS	24.00	rwrig6
38	6/7/2015 06:00	37.50	TRIPPING IN HOLE	DRILLING TRIP FOR MOTOR, SURVEYS & CONNECTIONS, RIG SERVICE	24.00	rwrig6

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39	6/8/2015 06:00	38.50	DRILLING 6 1/8" PRODUCTION HOLE	TRIP IN HOLE, SLIP & CUT DRILL LINE, WASH TO BOTTOM, CIRCULATE GAS OUT, DRILLING, SERVICE RIG, SURVEYS & CONNECTIONS	24.00	rwrig6
40	6/9/2015 06:00	39.50	DRILLING 6 1/8" PRODUCTION HOLE	DRILLING, TRIP FOR BIT & MOTOR, WASH & REAM TO BOTTOM, DRILLING	24.00	rwrig6
1	6/9/2015 06:00			CONTRACT WORK		50170
1	6/9/2015 06:00			CONTRACT WORK		50170
41	6/10/2015 06:00	40.50	TRIP OUT FOR BIT & MOTOR	DRILLING, RIG SERVICE, SURVEYS & CONNECTIONS, TRIP OUT FOR BIT & MOTOR	24.00	rwrig6
2	6/10/2015 06:00			CONTRACT WORK		50170
42	6/11/2015 06:00	41.50	DRILLING 6 1/8" PRODUCTION HOLE	CHANGE OUT DIRECTIONAL TOOLS, BIT AND MOTOR., TRIP IN HOLE. SAFETY WASH 120' TO BOTTOM, CIRCULTE GAS OUT OF HOLE AND BREAK IN BIT. DRILL F/14400 T/14471 CONNECTIONS AND SURVEYS	24.00	rwrig6
43	6/12/2015 06:00	42.50	DRILLING 6 1/8" PRODUCTION HOLE	DRILL F/14471 T/14474.LOST DIFF. PSI, CIRCULTE BOTTOMS UP, TRIP OUT OF HOLE FOR MOTOR. CHANGE BIT, MOTOR, ORIENT MWD TOOL, TRIP IN TO SHOE, SLIP AND CUT DRILL LINE, TRIP IN HOLE TO 14370', SAFETY WASH TO BOTTOM, CIRCULATE OUT TRIP GAS ON CHOKE, DRILL F/14474' T/, SURVEYS AND CONNECTIONS	24.00	rwrig6
44	6/13/2015 06:00	43.50	DRILLING 6 1/8" PRODUCTION HOLE	DRILL F/14500 T/14558, RIG SERVICE. DRILL F/14558 T/14647 CONNECTIONS AND SURVEYS	24.00	rwrig6
45	6/14/2015 06:00	44.50	SAFETY REAM TO BOTTOM, CRICULATE OUT TRIP GAS	DRILL F/14647 T/14653, RIG SERVICE, DRILL F/14653 T/14690, CIRCULTE BOTTOMS UP AND TRIP OUT OF HOLE FOR BIT, CHANGE OUT BIT MOTOR AND ORIENT MWD TOOL, TRIP IN HOLE SAFETY WASH 130' TO BOTTOM,	24.00	rwrig6
46	6/15/2015 06:00	45.50	DRILLING 6 1/8" PRODUCTION HOLE	CIRCULTE GAS OUT OF HOLE AND BREAK IN BIT. DRILL F/14690 T/14745, RIG SERVICE. DRILL F/14745 T/14835, SURVEYS AND CONNECTIONS	24.00	rwrig6
47	6/16/2015 06:00	46.50	CHANGE OUT BHA ORIENT MWD	DRILL F/14835 T/14842', ROUTINE RIG SERVICE, DRILL F/14842' T/14934', SURVEYS AND CONNECTIONS, PUMP PILL TRIP OUT FOR BIT AND MOTOR,	24.00	rwrig6
48	6/17/2015 06:00	47.50	TRIP OUT FOR BIT # 18	FINISH TRIP OUT OF HOLE, CHANGE OUT BHS. TRIP IN HOLE, SAFETY WASH 95' TO BOTTOM, CIRCULATE OUT GAS AND BREAK IN BIT, DRILL F/14934' T/14954', RIG SERVICE, DRILL F/14954' T/15014, CONNECTIONS AND SURVEYS, PUMP PILL TRIP OUT FOR BIT AND MOTOR	24.00	rwrig6
49	6/18/2015 06:00	48.50	DRILL 6 1/8" PRODUCTION HOLE	TRIP OUT OF HOLE FOR BIT.CHAHGE OUT BHA. TRIP IN HOLE TO SHOE, ADJUST BRAKES AND RIG SERVICE, TRIP IN HOLE T/14914', SAFETY REAM TO BOTTOM UNDER GAGE F/15000' T/15014', DRILL F/15014' T/15078', CONNECTIONS AND SURVEYS	24.00	rwrig6
50	6/19/2015 06:00	49.50	DRILL 6 1/8" PRODUCTION HOLE	DRILL F/15078 T/15121, CHANGE OUT SAVER SUB, DRILL F/15121' T/15135', ROUTINE RIG SERVICE, DRILL F/15135' T/15166', CHANGE OUT SAVER SUB, DRILL F/15166' T/15192, CONNECTIONS	24.00	rwrig6
51	6/20/2015 06:00	50.50	DRILL 6 1/8" PRODUCTION HOLE	DRILL F/15192 T/15227', CHANGE OUT SAVER SUB, ROUTINE RIG SERVICE, DRILL F/15227' T/15386, CHANGE OUT SAVER SUB, DRILL F/15386 T/15400' CONNECTIONS AND SURVEYS	24.00	rwrig6

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52	6/21/2015 06:00	51.50	DRILL 6 1/8" PRODUCTION HOLE	DRILL F/15400' T/15535', CHANGE OUT SAVER SUB, CONNECTIONS AND SURVEYS, DRILL F/15535' T/15608, CONNECTIONS AND SURVEYS	24.00	rwrig6
53	6/22/2015 06:00	52.50	DRILL 6 1/8" PRODUCTION HOLE	DRILL F/15608 T/15609. CIRCULTE BOTTOMS UP, TRIP OUT FOR BIT, CHANGE OUT BIT MOTOR, MONELS AND DRILL REAM ORIENT MWD TOOL,TRIP IN HOLE TO SHOE @12082', CHANGE SWIVEL PACKING AND SAVER SUB, TRIP IN HOLE TO 15480', REAM F/15480' T/15609' PARTIAL PACKING OFF CIRCULATE OUT TRIP GAS, DRILL F/15609' T/15624	24.00	rwrig6
54	6/23/2015 06:00	53.50	TRIPPING HOLE WITH BIT #21	DRILL F/15624 T/15762' TROUBLE SHOOT MWD & PRESSURE PROBLEM, TRIP OUT WET PUMP SECOND PILL DISPLACE PILL TO BACK SIDE FOR ECD, CHANGE BIT, MOTOR, AND OREINT MWD, TRIP IN HOLE	24.00	rwrig6
55	6/24/2015 06:00	54.50	DRILL 6 1/8" PRODUCTION HOLE	ROUTINE RIG SERVICE, TRIP IN HOLE WITH BIT #21, WASH 180' TO BOTTOM, DRILL F/15762'	24.00	rwrig6
56	6/25/2015 06:00	55.50	TEST BOP	DRILL, SURVEY & CONNECTION, TROUBLE SHOOT MWD (NO PULSE), CIRCULATE B/U, PULL OUT HOLE, TEST BOP,	24.00	rwrig6
57	6/26/2015 06:00	56.50	DRILL 6 1/8" PRODUCTION HOLE	FINISH TESTING BOP, INSTALL WEAR BUSHING, MAKE UP DIR. TOOLS & SCRIBE, TRIP IN HOLE TO SHOE, SLIP & CUT DRILL LINE, SERVICE RIG & TOP DRIVE, TRIP IN HOLE TO 15,763, WASH & REAM 128' TO BOTTOM FOR SAFETY, CHANGE OUT ROT RUBBER, DRILL AHEAD, SURVEY & CONNECTION	24.00	rwrig6
58	6/27/2015 06:00	57.50	DRILL 6 1/8" PRODUCTION HOLE	SERVICE RIG & TOP DRIVE, DRILL, SURVEY & CONNECTION	24.00	rwrig6
59	6/28/2015 06:00	58.50	DRILL 6 1/8" PRODUCTION HOLE	SERVICE RIG & TOP DRIVE, DRILL, SURVEY & CONNECTION, 10 STANDS WIPER TRIP	24.00	rwrig6
60	6/29/2015 06:00	59.50	TRIP IN HOLE	SERVICE RIG & TOP DRIVE, DRILL, CIRCUULATE HOLE CLEAN, TRIP OUT FOR MOTOR FAILURE, L/D NATIVES DIRECTIONAL TOOLS AND RELEASE NATIVE, PJSM WITH SCIENTIFIC, P/U DIRECTIONAL TOOLS & SCRIBE, TRIP IN HOLE FILLING EVERY 35 STANDS & TEST MWD TOOL.	24.00	rwrig6
61	6/30/2015 06:00	60.50	DRILL 6 1/8" PRODUCTION HOLE	SERVICE RIG & TOP DRIVE, FINISH TRIP IN HOLE, WASH & REAM 211' TO BOTTOM & OVER LAP GAMMA, CHANGE OUT SAVER SUB ON TOP DRIVE, DRILL, SURVEY & CONNECTION	24.00	rwrig6
3	6/30/2015 06:00			CONTRACT WORK		50170
62	7/1/2015 06:00	61.50	RIG REPAIR DRAWWORK	SERVICE RIG & TOP DRIVE, DRILL, SURVEY & CONNECTION, CIRC BOTTOM UP, TRIP OUT FOR BIT & MOTOR, RE-MOVE HIGH CLUTCH CHAIN FROM DRAWWORK, CONTINUE TRIP OUT HOLE, CHANGE OUT BIT, MUD MOTOR, MWD TOOLS CHECK OLD SCRIBE OK & RE-SCRIBE, TRIP IN HOLE TO 2,950' FILL PIPE TEST MWD TOOL, INSTALL HIGH CLUTCH CHAIN ON DRAWWORK	24.00	rwrig6
63	7/2/2015 06:00	62.50	DRILL 6 1/8" PRODUCTION HOLE	RIG REPAIR (INSTALL NEW HIGH DRUM CHAIN, SLIP & CUT DRILL LINE, TRIP IN HOLE TO 16,238, SERVICE RIG & TOP DRIVE, REAM TO BOTTOM & OVER LAP GAMMA, DRILL, SURVEYS & CONNECTIONS	24.00	rwrig6
2	7/2/2015 06:00			CONTRACT WORK		50170
4	7/2/2015 06:00			CONTRACT WORK		50170

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64	7/3/2015 06:00	63.50	DRILL 6 1/8" PRODUCTION HOLE	SERVICE RIG & TOP DRIVE, DRILL, SURVEY & CONNECTION, TRIP OUT FOR BIT & MOTOR, L/D SCIENTIFIC DIRECTIONAL TOOLS AND RELEASE SCIENTIFIC, M/U BIT, MUD MOTOR, 2 JTS. DRILL PIPE DRILL-N-REAMER, TRIP IN HOLE, WASH & REAM SAFETY F/16,395 TO 16,493 CHANGE OUT ROT RUBBER	24.00	rwrig6
5	7/3/2015 06:00			CONTRACT WORK		50170
3	7/3/2015 06:00			CONTRACT WORK		50170
65	7/4/2015 06:00	64.50	TRIP IN HOLE W/HWDP TIGHTEN UP EVERY BRAKE	DRILLING, RIG SERVICE, SURVEYS & CONNECTIONS, PUMP WEIGHTED SWEEP WITH CALCIUM CARBONATE, 50 STANDS WIPER TRIP, TRIP IN HOLE W/ HWDP TIGHTEN UP EVERY BRAKE.	24.00	rwrig6
6	7/4/2015 06:00			CONTRACT WORK		50170
66	7/5/2015 06:00	65.50	REAM WITH D-NR	FINISH TRIP IN HOLE (REAM TIGHT HOLE @ 15,950 15,976, PUMP SWEEP, CIRCULATE OUT, PUMP & SPOT BEADS, WIPER TRIP TO 15,700 (TIGHT HOLE @ 15,832 & 16,032, PUMP SWEEP, CIRCULATE OUT & PUMP SLUG, TRIP OUT FOR REAMER RUN (TIGHT HOLE @ 16013, 15941, 15831), L/D BIT, MUD MOTOR, REAMER AND RE-MOVE BOTTOM PART OF THE ROT RUBBER, M/U REAMING ASSY BIT, BIT SUB W/FLOAT, 1 JT. HWDP, D-N-R, 1 JT. HWDP, D-NR, , TRIP IN HOLE FILL EVERY 35 STANDS TO 12,058', SLIP & CUT DRILL LINE, PUMP 35 BBLs WEIGHTED CAL CARBONATE SWEEP & CIRCULATE OUT	24.00	rwrig6
67	7/6/2015 06:00	66.50	CIRCULATE OUT WEIGHTED CAL CARBONATE SWEEP & CIRCULATE OUT	SERVICE RIG & TOP DRIVE, REAM, CHANGE OUT SAVER SUB ON TOP DRIVE, PUMP 35 BBLs WEIGHTED CAL CARBONATE SWEEP & CIRCULATE OUT, BACK REAMING HIGH TORQUE AREAS 15,212 TO 15,253 & 15,561 TO 15,611 & 15,660 TO 15,669 & 15,960 TO 15,966	24.00	rwrig6
68	7/7/2015 06:00	67.50	RUN 4 1/2" LINER	CIRCULATE OUT SWEEP & PUMP SLUG, WIPER TRIP TO 12,135, PUMP SWEEP, CIRCULATE OUT, PUMP & SPOT BEADS, PUMP SLUG & TRIP OUT TO 12,100, SPOT 50bbls 16# MUD, TRIP OUT TO RUN 4 1/2" PRODUCTION CASING, L/D D-N-R, 2 JTS. HWDP, BIT SUB, BIT, PJSM W/ RIG CREW, US THREAD REP., WEATHERFORD AND HOWCO, RIG UP, M/U FLOAT SHOE, ONE JT. 2X FLOAT COLLARS, RSI, ONE JT. PUMP THROUGH FLOAT OK RUN 4 1/2" CASING. FILL LINER WITH 2% FILTERED SUBSTITE WATER,	24.00	rwrig6
7	7/7/2015 06:00			CONTRACT WORK		50170
4	7/7/2015 06:00			CONTRACT WORK		50170
69	7/8/2015 06:00	68.50	DISPLACE HOLE WITH 2% KCL WATER	CONTINUE TO RUN 4 1/2" PRODUCTION LINER, M/U LINER HANGER PUMP 2 BBLs THRU FLOATS, MAKE UP VERSA FLEX HANGER & RUNNING TOOL, RIG DOWN CASING CREW, PJSM, TRIP IN HOLE WITH PRODUCTION LINER, RIG SERVICE, TRIP IN HOLE WITH LINER ON 4" DRILL PIPE, SET LINER, TEST BACK, TO 4000 PSI, DISPLACE HOLE WITH 2% KCL WITH HOWCO, PUMPING 0.3BBL/MIN WITH 2050 PSI	24.00	rwrig6
8	7/8/2015 06:00			CONTRACT WORK		50170
70	7/9/2015 06:00	69.50	LAYING DOWN DRILL STRING	DISPLACE OBM FROM HOLE WITH 2% CLAYFIX WATER, FLOW CHECK WELL, RIG DOWN HALLIBURTON, HELD PJSA RIG UP LAYDOWN TRUCK, LAYDOWN 4" DRILL STRING,	24.00	rwrig6
9	7/9/2015 06:00			CONTRACT WORK		50170

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Sundry Number : 65680 API Well Number : 43047533070000

RPT #	End Date	Cum Time Log (days)	Current Ops	Summary	Time Log Hrs (hr)	syscreateuser
71	7/10/2015 06:00	70.50	NIPPLE DOWN BOP AND SET NIGHT CAP	LAYDOWN 4" DRILL STRING AND LINER HANGER RUNNING TOOL, PULL WEAR BUSHING, HELD P.J.S.A AND RIG WEATHERFORD CASING EQUIPMENT, RUN 4 1/2" TIEBACK STRING, CIRCULTE 238 BBLs CLAY WEB WATER. SPACE OUT AND LAND TIE BACK STRING AND TEST. SET PACK OFF ASSEMBLY AND TEST TO 4000 PSI. INSTALL BPV.NIPPLE DOWN BOP AND INSTALL NIGHT CAP.	24.00	rwrig6
10	7/10/2015 06:00			CONTRACT WORK		50170
11	7/11/2015 06:00			CONTRACT WORK		50170
5	7/18/2015 06:00	1.00	Well shut in.	MI (25) 1,000 bbls CHI frac tanks and (5) HES mountain movers. Start laying "Rockwater" water supply line. Prep to set Cameron 4 1/16" 15K frac tree and Weatherford FBE in morning. Waiting on completion. (Est. frac date 7-21-15)	24.00	seiffert.contractor
6	7/19/2015 06:00	2.00	Well shut in.	Pre-fill (5) HES mountain movers and continue laying "Rockwater" water supply line. NU 4 1/16" 15K frac tree. Install 2-way check and test stack to 14,000 psi. Good test. Bleed to zero psi and remove 2-way check valve. RU Weatherford ball catcher FBE. Waiting on completion. (Est. frac date 7-21-15)	24.00	seiffert.contractor
7	7/20/2015 06:00	3.00	Well shut in.	Finish laying "Rockwater" water supply line and start filling frac tanks. MI Cutters ELU crane and HES frac equipment. Waiting on completion. (Est. frac date 7-21-15)	24.00	seiffert.contractor
8	7/21/2015 06:00	4.00	Well shut in.	Rockwater finish filling frac tanks. MI and fill 400 bbl upright tank with fresh water. Finish MIRU HES frac equipment. Prep to start completion in morning.	24.00	seiffert.contractor
9	7/22/2015 06:00	4.92	Start 24 hr completion.	Prime up and test HES main line to 13,000 psi and Annulus line to 9,000 psi. Good test. Drop ball and frac stages #1 thru #7. At report time, fracing stage #8.	22.00	seiffert.contractor
10	7/23/2015 06:00	5.92	Continue 24 hr completion.	Finish fracing stage #8. Screen out stage #8 with 110 bbls left in flush, leaving 100 sks 30/50 PRC sand in wellbore. Try flowing back/surging well several times without success (well flowed 1/2 bpm for 3+ hrs with zero pressure). RDMO HES frac equipment. MIRU CTS 2" CTU. MU 1 3/4" wash nozzle tool. NU CT stack and test to 5,000 psi. RIH, tag sand and wash out from 15,374' to 15,835' (ctm). Pump final sweep and POOH at report time.	24.00	seiffert.contractor
11	7/24/2015 06:00	6.92	Continue 24 hr completion.	Finish POOH and RD set aside CTS 2" coil unit. SIW and RU HES pump trucks. Prime up and test HES main line to 13,000 psi. Good test. Pump 180 bbls FR water down csg @ 3.7 bpm and 11,500 +/- psi (pressured out 3 times) while holding 5,200 psi on backside. SIW and RD HES pump trucks. RU CTS 2" CTU. MU (1) Cutters (8) 1-11/16" TCP gun (OD-1.69") and 6 spf (total of 42 shots) with 60° phasing. 1- (1) BPV Dual flapper (OD-1.7"), 1- (2.0") CC. NU CT stack and test to 5,000 psi. Good test. RIH, tag sleeve #7 @ 15,853' ctm (ball/sleeve #7 @ 15,872). PU to 15,553' and perforate stage #9 from 15,565' - 15,572' (swell packer between stage #8 and stage #9 at 16,644'). POOH. RDMO CTS 2" coil unit. RU HES pump trucks. Prime up and test HES main line to 13,000 psi and annulus line to 9,000 psi. Good tests. Load casing, drop dissolvable ball and shift sleeve #9. Establish injection rate of 10.6 bpm at 10,100 psi. SD and at report time, replacing backside pump while waiting on 15% HCL acid.	24.00	seiffert.contractor

RW 24-14A (GR)

Sundry Number : 65680 API Well Number : 43047533070000

RPT #	End Date	Cum Time Log (days)	Current Ops	Summary	Time Log Hrs (hr)	syscreateuser
12	7/25/2015 06:00	7.92	Continue 24 hr completion.	Finish replacing backside pump and RU acid pump truck. Prime up and test HES main line to 13,000 psi and annulus line to 9,000 psi. Good tests. Frac stage #9. Drop dissolvable balls and frac stages #10 thru #12. Stage #12 pressured out with 55 bbls left in flush leaving 1,100 lbs PRC sand in wellbore. Flow back 850 bbls until sand cleaned up. Load csg and establish injection rate of 35 bpm. Drop dissolvable balls and frac stages #13 and #14. At report time, fracing stage #15.	24.00	seiffert.contractor
13	7/26/2015 06:00	8.92	Continue 24 hr completion.	Finish fracing stage #15. Drop dissolvable balls and frac stages #16 thru #18. Pressured out stage #18 with 20 bbls left in flush leaving 1,200 lbs 100 mesh in wellbore. Flowed 310 bbls back cleaning up wellbore. Load csg and establish injection rate of 25 bpm and 5,988 psi. Drop dissolvable balls and frac stages #19 thru #22. At report time, fracing stage #23.	24.00	seiffert.contractor
14	7/27/2015 06:00	9.92	Continue 24 hr completion.	Finish fracing stage #23. Drop dissolvable balls and frac stages #24 thru #29. SD a total of (8 hrs) for HES pump maintenance. At report time, MIRU Cutters ELU.	24.00	seiffert.contractor
15	7/28/2015 06:00	10.92	Continue 24 hr completion.	Finish MIRU Cutters ELU. Plug, perf and frac stages #30 and #31. SIW. RDMO Cutters ELU and HES frac equipment. MIRU CTS 2" coil unit and Weatherford FBE. MU QES 3 1/8" (3 bpm) motor/jars with 3.625" 5-blade AR mill. NU stack and test to 10,000 psi. Good test. RIH and drill out (2) CFP and (11) sleeves. At report time, POOH to vertical section with EOCT at 13,841' (showing some drag).	24.00	seiffert.contractor
12	7/28/2015 06:00			CONTRACT WORK		50170
16	7/29/2015 06:00	11.92	Continue 24 hr completion.	Finish POOH to vertical section. RBIH and drill out (29 of 29) sleeves to CTU depth of 16,580'. Pump final sweep and POOH. SIW and LD QES tools. RDMO CTS 2" coil unit. RU Weatherford Flow test equipment. Release all auxiliary equipment. Turn well over to production group. Job complete.	24.00	seiffert.contractor
13	7/31/2015 06:00			CONTRACT WORK		50170
1	8/1/2015 06:00			CONTRACT WORK		50170
14	8/5/2015 06:00			CONTRACT WORK		50170

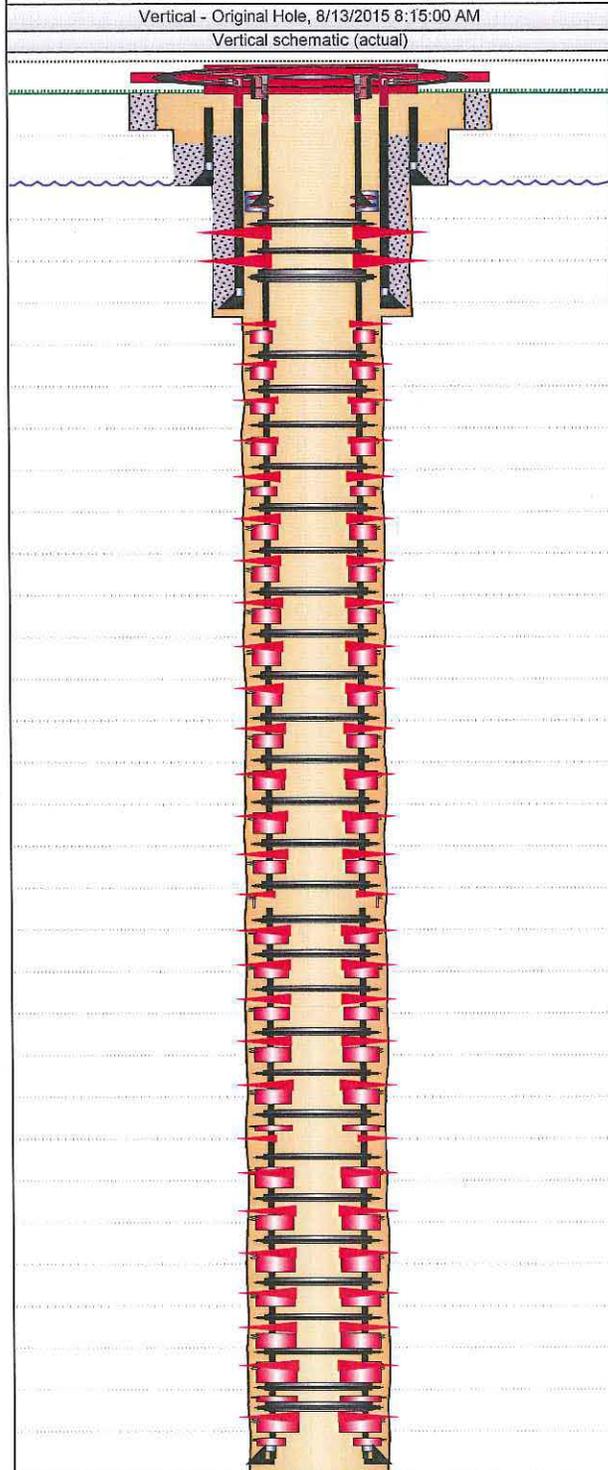


Downhole Well Profile

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT100224	Gr Elev (ft) 5,269.1	Current Elevation 5,299.10, SST 88 - KB 30	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
			Total Depth (All) (ft, KB) Original Hole - 16,673.0		

Type CAMERON	Des	Make	Model	WP (psi)	Service	WP Top (psi)	Top Ring Gasket	Bore Min (in)



Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Top Thread	Set Depth (ft, KB)
CONDUCTOR	14	36.00	J-55	WELD	110.0
SURFACE CASING	9 5/8	40.00	L-80	LT&C	3,984.0
INTERMEDIATE CASING	7	29.00	HCP-110	LT&C	12,136.0
PRODUCTION LINER	4 1/2	15.10	Q-125	CDC	16,668.0
TIE-BACK CASING	4 1/2	15.10	Q-125	CDC	11,212.0

Date	Top (ft, KB)	Btm (ft, KB)	Completion
7/27/2015	11,730.0	11,745.0	MESAVERDE, Original Hole
7/27/2015	11,970.0	11,995.0	MESAVERDE, Original Hole
7/27/2015	12,164.0	12,165.0	MESAVERDE, Original Hole
7/26/2015	12,332.0	12,333.0	MESAVERDE, Original Hole
7/26/2015	12,494.0	12,495.0	MESAVERDE, Original Hole
7/26/2015	12,667.0	12,668.0	MESAVERDE, Original Hole
7/26/2015	12,837.0	12,838.0	MESAVERDE, Original Hole
7/26/2015	13,005.0	13,006.0	MESAVERDE, Original Hole
7/26/2015	13,173.0	13,174.0	MESAVERDE, Original Hole
7/25/2015	13,345.0	13,346.0	MESAVERDE, Original Hole
7/25/2015	13,513.0	13,514.0	MESAVERDE, Original Hole
7/25/2015	13,687.0	13,688.0	MESAVERDE, Original Hole
7/25/2015	13,856.0	13,857.0	MESAVERDE, Original Hole
7/25/2015	14,028.0	14,029.0	MESAVERDE, Original Hole
7/25/2015	14,194.0	14,195.0	MESAVERDE, Original Hole
7/25/2015	14,363.0	14,364.0	MESAVERDE, Original Hole
7/25/2015	14,534.0	14,535.0	MESAVERDE, Original Hole
7/25/2015	14,706.0	14,707.0	MESAVERDE, Original Hole
7/24/2015	14,875.0	14,876.0	MESAVERDE, Original Hole
7/24/2015	15,045.0	15,046.0	MESAVERDE, Original Hole
7/24/2015	15,214.0	15,215.0	MESAVERDE, Original Hole
7/24/2015	15,373.0	15,374.0	MESAVERDE, Original Hole
7/23/2015	15,553.0	15,560.0	MESAVERDE, Original Hole
7/22/2015	15,705.0	15,706.0	MESAVERDE, Original Hole
7/22/2015	15,872.0	15,873.0	MESAVERDE, Original Hole
7/21/2015	16,044.0	16,045.0	MESAVERDE, Original Hole
7/21/2015	16,210.0	16,211.0	MESAVERDE, Original Hole
7/21/2015	16,333.0	16,334.0	MESAVERDE, Original Hole
7/21/2015	16,416.0	16,417.0	MESAVERDE, Original Hole
7/21/2015	16,577.0	16,578.0	MESAVERDE, Original Hole

Tubing Description	Run Date	String Length (ft)	Set Depth (ft, KB)
Item Des	Jts	Make	Model
			OD (in)
			Wt (lb/ft)
			Grade
			Len (ft)

Rod Description	Run Date	String Length (ft)	Set Depth (ft, KB)

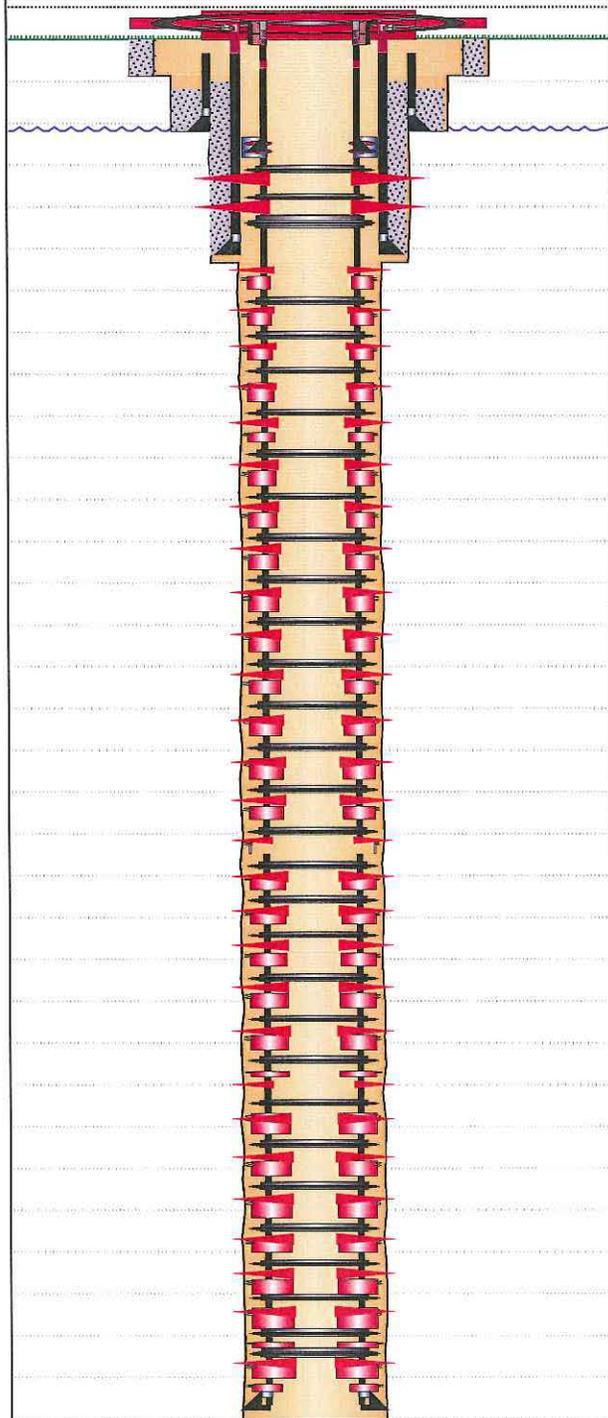


Downhole Well Profile

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical
Unique Well ID UT100224	Gr Elev (ft) 5,269.1	Current Elevation 5,299.10, SST 88 - KB 30	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
					Total Depth (All) (ft, KB) Original Hole - 16,673.0

Vertical - Original Hole, 8/13/2015 8:15:00 AM	Item Des	Jts	Make	Model	OD (in)	Wt (lb/ft)	Grade	Len (ft)
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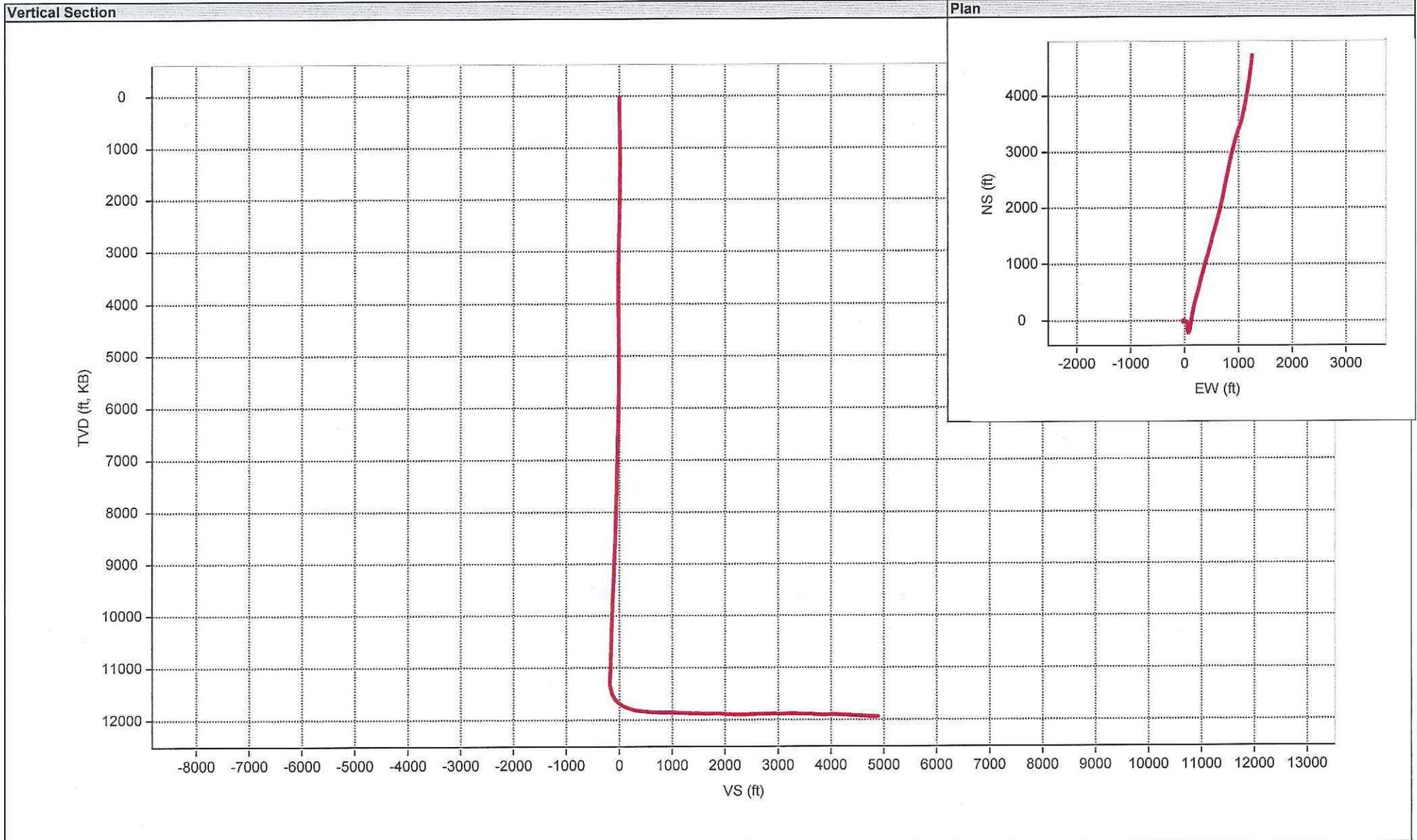
Vertical - Original Hole, 8/13/2015 8:15:00 AM	Item Des	Jts	Make	Model	OD (in)	Wt (lb/ft)	Grade	Len (ft)
Vertical schematic (actual)								



Directional Plot_Plan vs Actual

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Well Configuration Type Vertical	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00
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Directional Survey

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30
Wellbore Name Original Hole	Parent Wellbore Original Hole	Sidetrack Start Depth (ft, KB)		Vertical Section Direction (°) 15.82		
Date 5/4/2015	Definitive? No	Description surveys		Proposed? No		
MD Tie In (ft, KB) 0.00	TVD Tie In (ft, KB) 0.00	Inclination Tie In (°) 0.00	Azimuth Tie In (°) 0.00	NSTie In (ft) 0.00	EWTie In (ft) 0.00	

Survey Data													
MD (ft, KB)	Incl (°)	Azm (°)	Tool Type	Date	Survey Company	TVD (ft, KB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)	Traverse Distance (ft)
0.00	0.00	0.00	EM	5/4/2015	Native...	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.00	0.00	0.00	EM	5/4/2015	Native...	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.00	0.52	29.11	EM	5/4/2015	Native...	145.00	0.46	0.25	0.51	0.45	0.45	25.31	0.52
236.00	0.92	7.84	EM	5/4/2015	Native...	235.99	1.54	0.55	1.63	0.52	0.44	-23.37	1.65
327.00	0.65	12.41	EM	5/4/2015	Native...	326.98	2.77	0.77	2.87	0.30	-0.30	5.02	2.89
419.00	0.79	4.86	EM	5/4/2015	Native...	418.98	3.91	0.93	4.02	0.18	0.15	-8.21	4.05
509.00	1.05	0.90	EM	5/4/2015	Native...	508.96	5.35	1.00	5.42	0.30	0.29	-4.40	5.49
600.00	1.62	359.58	EM	5/4/2015	Native...	599.94	7.47	1.00	7.46	0.63	0.63	394.15	7.61
692.00	0.74	358.27	EM	5/4/2015	Native...	691.92	9.37	0.97	9.28	0.96	-0.96	-1.42	9.51
783.00	0.48	316.17	EM	5/4/2015	Native...	782.91	10.23	0.69	10.03	0.55	-0.29	-46.26	10.41
875.00	0.92	331.11	EM	5/4/2015	Native...	874.91	11.15	0.07	10.75	0.51	0.48	16.24	11.53
966.00	1.05	319.42	EM	5/4/2015	Native...	965.89	12.43	-0.83	11.73	0.26	0.14	-12.85	13.08
1,058.00	1.05	308.96	EM	5/4/2015	Native...	1,057.88	13.60	-2.03	12.53	0.21	0.00	-11.37	14.76
1,148.00	1.09	295.16	EM	5/4/2015	Native...	1,147.86	14.48	-3.45	12.99	0.29	0.04	-15.33	16.43
1,238.00	0.96	280.75	EM	5/4/2015	Native...	1,237.85	14.98	-4.96	13.06	0.32	-0.14	-16.01	18.03
1,329.00	1.18	280.75	EM	5/4/2015	Native...	1,328.83	15.30	-6.63	12.91	0.24	0.24	0.00	19.73
1,423.00	1.19	265.98	EM	5/5/2015	Native...	1,422.81	15.41	-8.56	12.50	0.32	0.01	-15.71	21.66
1,514.00	1.27	260.18	EM	5/5/2015	Native...	1,513.79	15.17	-10.49	11.74	0.16	0.09	-6.37	23.61
1,607.00	1.31	265.63	EM	5/5/2015	Native...	1,606.77	14.92	-12.57	10.93	0.14	0.04	5.86	25.70
1,733.00	1.58	260.09	EM	5/5/2015	Native...	1,732.73	14.51	-15.72	9.68	0.24	0.21	-4.40	28.87
1,828.00	1.75	264.66	EM	5/5/2015	Native...	1,827.69	14.15	-18.45	8.58	0.23	0.18	4.81	31.63
1,923.00	1.62	254.55	EM	5/5/2015	Native...	1,922.65	13.66	-21.19	7.36	0.34	-0.14	-10.64	34.41
2,018.00	1.80	260.00	EM	5/5/2015	Native...	2,017.60	13.04	-23.95	6.02	0.26	0.19	5.74	37.24
2,113.00	1.09	234.34	EM	5/5/2015	Native...	2,112.57	12.25	-26.16	4.66	0.99	-0.75	-27.01	39.58
2,208.00	1.58	219.49	EM	5/5/2015	Native...	2,207.55	10.72	-27.72	2.75	0.63	0.52	-15.63	41.78
2,303.00	1.45	227.84	EM	5/5/2015	Native...	2,302.52	8.90	-29.45	0.53	0.27	-0.14	8.79	44.28
2,398.00	1.40	210.17	EM	5/5/2015	Native...	2,397.49	7.09	-30.92	-1.61	0.46	-0.05	-18.60	46.62
2,493.00	1.36	207.18	EM	5/5/2015	Native...	2,492.46	5.08	-32.02	-3.84	0.09	-0.04	-3.15	48.91
2,588.00	1.01	214.30	EM	5/5/2015	Native...	2,587.44	3.39	-33.01	-5.74	0.40	-0.37	7.49	50.87
2,683.00	1.14	189.77	EM	5/5/2015	Native...	2,682.42	1.76	-33.64	-7.47	0.50	0.14	-25.82	52.61
2,778.00	1.19	188.90	EM	5/5/2015	Native...	2,777.40	-0.14	-33.95	-9.39	0.06	0.05	-0.92	54.54
2,872.00	1.13	183.76	EM	5/5/2015	Native...	2,871.38	-2.03	-34.16	-11.27	0.13	-0.06	-5.47	56.44
2,968.00	1.31	166.94	EM	5/5/2015	Native...	2,967.36	-4.04	-33.98	-13.15	0.42	0.19	-17.52	58.46
3,062.00	1.45	157.08	EM	5/5/2015	Native...	3,061.33	-6.19	-33.27	-15.02	0.29	0.15	-10.49	60.72
3,157.00	1.93	150.67	EM	5/5/2015	Native...	3,156.29	-8.69	-32.02	-17.09	0.54	0.51	-6.75	63.52
3,252.00	1.84	154.01	EM	5/5/2015	Native...	3,251.24	-11.45	-30.57	-19.35	0.15	-0.09	3.52	66.64
3,347.00	2.37	111.91	EM	5/6/2015	Native...	3,346.18	-13.56	-28.08	-20.70	1.67	0.56	-44.32	69.90
3,442.00	2.15	126.94	EM	5/6/2015	Native...	3,441.11	-15.36	-24.83	-21.55	0.66	-0.23	15.82	73.61
3,537.00	2.32	116.74	EM	5/6/2015	Native...	3,536.04	-17.30	-21.69	-22.56	0.45	0.18	-10.74	77.30
3,632.00	2.24	101.71	EM	5/6/2015	Native...	3,630.96	-18.54	-18.15	-22.79	0.63	-0.08	-15.82	81.05
3,727.00	2.32	103.65	EM	5/6/2015	Native...	3,725.89	-19.37	-14.47	-22.58	0.12	0.08	2.04	84.83
3,823.00	2.02	96.35	EM	5/6/2015	Native...	3,821.82	-20.02	-10.90	-22.23	0.42	-0.31	-7.60	88.46
3,918.00	1.66	93.71	EM	5/6/2015	Native...	3,916.77	-20.29	-7.86	-21.66	0.39	-0.38	-2.78	91.51
3,938.00	1.80	93.63	EM	5/6/2015	Native...	3,936.76	-20.33	-7.26	-21.54	0.70	0.70	-0.40	92.11
4,037.00	1.88	81.32	EM	5/9/2015	Native...	4,035.71	-20.18	-4.10	-20.54	0.41	0.08	-12.43	95.27
4,101.00	1.58	84.49	EM	5/9/2015	Native...	4,099.68	-19.94	-2.19	-19.78	0.49	-0.47	4.95	97.20
4,196.00	1.53	89.41	EM	5/9/2015	Native...	4,194.65	-19.80	0.39	-18.94	0.15	-0.05	5.18	99.78



Directional Survey

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30

Survey Data

MD (ft, KB)	Incl (°)	Azmp (°)	Tool Type	Date	Survey Company	TVD (ft, KB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)	Traverse Distance (ft)
4,291.00	1.40	89.85	EM	5/9/2015	Native...	4,289.62	-19.78	2.82	-18.27	0.14	-0.14	0.46	102.21
4,386.00	1.58	86.51	EM	5/9/2015	Native...	4,384.58	-19.70	5.28	-17.51	0.21	0.19	-3.52	104.68
4,480.00	1.49	80.09	EM	5/9/2015	Native...	4,478.55	-19.41	7.78	-16.56	0.21	-0.10	-6.83	107.19
4,575.00	1.71	84.31	EM	5/9/2015	Native...	4,573.51	-19.06	10.41	-15.50	0.26	0.23	4.44	109.84
4,671.00	1.84	87.12	EM	5/9/2015	Native...	4,669.47	-18.84	13.37	-14.48	0.16	0.14	2.93	112.81
4,766.00	1.80	85.72	EM	5/9/2015	Native...	4,764.42	-18.65	16.38	-13.48	0.06	-0.04	-1.47	115.83
4,861.00	1.80	88.97	EM	5/9/2015	Native...	4,859.37	-18.51	19.36	-12.53	0.11	0.00	3.42	118.81
4,956.00	1.75	92.13	EM	5/9/2015	Native...	4,954.33	-18.54	22.30	-11.76	0.12	-0.05	3.33	121.76
5,051.00	1.49	99.51	EM	5/9/2015	Native...	5,049.29	-18.80	24.97	-11.28	0.35	-0.27	7.77	124.44
5,146.00	1.27	104.79	EM	5/10/2015	Native...	5,144.26	-19.27	27.21	-11.12	0.27	-0.23	5.56	126.72
5,241.00	1.31	110.41	EM	5/10/2015	Native...	5,239.24	-19.92	29.24	-11.19	0.14	0.04	5.92	128.86
5,336.00	1.40	111.47	EM	5/10/2015	Native...	5,334.21	-20.72	31.34	-11.39	0.10	0.09	1.12	131.10
5,431.00	1.45	116.48	EM	5/10/2015	Native...	5,429.18	-21.68	33.50	-11.73	0.14	0.05	5.27	133.46
5,525.00	1.36	126.76	EM	5/10/2015	Native...	5,523.15	-22.88	35.46	-12.35	0.28	-0.10	10.94	135.76
5,621.00	1.36	132.83	EM	5/10/2015	Native...	5,619.13	-24.34	37.20	-13.27	0.15	0.00	6.32	138.03
5,716.00	1.31	139.77	EM	5/10/2015	Native...	5,714.10	-25.93	38.73	-14.39	0.18	-0.05	7.31	140.24
5,811.00	1.23	149.17	EM	5/10/2015	Native...	5,809.08	-27.64	39.96	-15.70	0.23	-0.08	9.89	142.34
5,906.00	1.36	157.08	EM	5/10/2015	Native...	5,904.05	-29.55	40.92	-17.28	0.23	0.14	8.33	144.48
6,001.00	1.40	160.25	EM	5/11/2015	Native...	5,999.02	-31.68	41.75	-19.10	0.09	0.04	3.34	146.77
6,097.00	1.45	153.74	EM	5/11/2015	Native...	6,094.99	-33.87	42.68	-20.96	0.18	0.05	-6.78	149.16
6,192.00	1.66	147.50	EM	5/11/2015	Native...	6,189.96	-36.11	43.95	-22.76	0.28	0.22	-6.57	151.73
6,287.00	1.88	155.24	EM	5/11/2015	Native...	6,284.91	-38.69	45.35	-24.86	0.34	0.23	8.15	154.66
6,382.00	1.88	152.86	EM	5/11/2015	Native...	6,379.86	-41.49	46.71	-27.19	0.08	0.00	-2.51	157.77
6,477.00	1.93	148.21	EM	5/11/2015	Native...	6,474.81	-44.24	48.26	-29.40	0.17	0.05	-4.89	160.93
6,572.00	2.02	153.48	EM	5/11/2015	Native...	6,569.75	-47.09	49.85	-31.72	0.21	0.09	5.55	164.20
6,667.00	1.62	158.84	EM	5/11/2015	Native...	6,664.71	-49.85	51.08	-34.03	0.46	-0.42	5.64	167.21
6,762.00	1.97	160.69	EM	5/11/2015	Native...	6,759.66	-52.64	52.11	-36.44	0.37	0.37	1.95	170.19
6,857.00	2.15	158.14	EM	5/11/2015	Native...	6,854.60	-55.83	53.31	-39.18	0.21	0.19	-2.68	173.60
6,952.00	1.66	161.74	EM	5/12/2015	Native...	6,949.55	-58.79	54.41	-41.73	0.53	-0.52	3.79	176.76
7,047.00	1.14	174.49	EM	5/12/2015	Native...	7,044.52	-61.04	54.93	-43.75	0.63	-0.55	13.42	179.07
7,142.00	1.49	174.84	EM	5/12/2015	Native...	7,139.49	-63.21	55.13	-45.79	0.37	0.37	0.37	181.25
7,237.00	0.79	226.34	EM	5/12/2015	Native...	7,234.47	-64.89	54.77	-47.51	1.24	-0.74	54.21	182.97
7,332.00	1.01	234.87	EM	5/12/2015	Native...	7,329.46	-65.83	53.61	-48.72	0.27	0.23	8.98	184.45
7,427.00	1.09	228.54	EM	5/12/2015	Native...	7,424.45	-66.91	52.25	-50.13	0.15	0.08	-6.66	186.19
7,522.00	1.40	209.99	EM	5/12/2015	Native...	7,519.43	-68.51	50.99	-52.02	0.53	0.33	-19.53	188.23
7,617.00	1.62	199.97	EM	5/13/2015	Native...	7,614.39	-70.78	49.95	-54.48	0.36	0.23	-10.55	190.72
7,712.00	1.97	194.79	EM	5/13/2015	Native...	7,709.35	-73.62	49.08	-57.45	0.41	0.37	-5.45	193.70
7,807.00	1.71	184.77	EM	5/13/2015	Native...	7,804.30	-76.61	48.54	-60.48	0.43	-0.27	-10.55	196.74
7,902.00	1.88	187.41	EM	5/13/2015	Native...	7,899.25	-79.57	48.22	-63.41	0.20	0.18	2.78	199.71
7,997.00	1.45	188.72	EM	5/13/2015	Native...	7,994.21	-82.30	47.84	-66.14	0.45	-0.45	1.38	202.47
8,092.00	1.40	182.75	EM	5/14/2015	Native...	8,089.18	-84.65	47.60	-68.47	0.16	-0.05	-6.28	204.83
8,187.00	1.27	184.42	EM	5/14/2015	Native...	8,184.15	-86.86	47.47	-70.63	0.14	-0.14	1.76	207.04
8,281.00	1.40	181.87	EM	5/14/2015	Native...	8,278.13	-89.04	47.35	-72.76	0.15	0.14	-2.71	209.23
8,376.00	1.62	185.12	EM	5/14/2015	Native...	8,373.10	-91.54	47.19	-75.21	0.25	0.23	3.42	211.74
8,471.00	1.84	185.56	EM	5/14/2015	Native...	8,468.05	-94.40	46.92	-78.03	0.23	0.23	0.46	214.60
8,566.00	2.02	178.53	EM	5/14/2015	Native...	8,563.00	-97.59	46.82	-81.13	0.31	0.19	-7.40	217.80
8,660.00	2.28	175.89	EM	5/14/2015	Native...	8,656.93	-101.11	46.99	-84.47	0.30	0.28	-2.81	221.32
8,756.00	2.59	173.69	EM	5/15/2015	Native...	8,752.85	-105.17	47.37	-88.27	0.34	0.32	-2.29	225.40
8,851.00	2.98	177.56	EM	5/15/2015	Native...	8,847.73	-109.77	47.71	-92.61	0.46	0.41	4.07	230.01
8,946.00	2.85	177.65	EM	5/15/2015	Native...	8,942.61	-114.60	47.91	-97.20	0.14	-0.14	0.09	234.84
9,041.00	1.80	180.46	EM	5/15/2015	Native...	9,037.53	-118.45	48.00	-100.88	1.11	-1.11	2.96	238.70



Directional Survey

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30

Survey Data

MD (ft, KB)	Incl (°)	Azm (°)	Tool Type	Date	Survey Company	TVD (ft, KB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)	Traverse Distance (ft)
9,136.00	1.93	178.97	EM	5/15/2015	Native...	9,132.48	-121.54	48.01	-103.85	0.15	0.14	-1.57	241.79
9,231.00	2.06	171.94	EM	5/15/2015	Native...	9,227.42	-124.83	48.28	-106.94	0.29	0.14	-7.40	245.09
9,326.00	2.54	172.02	EM	5/15/2015	Native...	9,322.35	-128.61	48.81	-110.43	0.51	0.51	0.08	248.90
9,421.00	3.25	174.75	EM	5/16/2015	Native...	9,417.22	-133.37	49.35	-114.87	0.76	0.75	2.87	253.70
9,516.00	2.85	173.78	EM	5/16/2015	Native...	9,512.09	-138.40	49.85	-119.57	0.42	-0.42	-1.02	258.75
9,610.00	2.10	173.08	EM	5/16/2015	Native...	9,606.00	-142.44	50.32	-123.32	0.80	-0.80	-0.74	262.81
9,705.00	2.28	172.38	EM	5/16/2015	Native...	9,700.93	-146.04	50.78	-126.66	0.19	0.19	-0.74	266.44
9,800.00	2.28	168.60	EM	5/16/2015	Native...	9,795.86	-149.76	51.40	-130.08	0.16	0.00	-3.98	270.22
9,895.00	2.41	168.95	EM	5/16/2015	Native...	9,890.78	-153.58	52.16	-133.54	0.14	0.14	0.37	274.11
9,990.00	2.46	175.36	EM	5/16/2015	Native...	9,985.69	-157.57	52.70	-137.23	0.29	0.05	6.75	278.14
10,085.00	2.90	170.97	EM	5/16/2015	Native...	10,080.59	-161.97	53.25	-141.32	0.51	0.46	-4.62	282.58
10,180.00	2.59	159.37	EM	5/17/2015	Native...	10,175.48	-166.36	54.38	-145.23	0.67	-0.33	-12.21	287.10
10,275.00	2.10	154.01	EM	5/17/2015	Native...	10,270.40	-169.93	55.90	-148.25	0.56	-0.52	-5.64	290.99
10,370.00	1.84	146.45	EM	5/17/2015	Native...	10,365.34	-172.76	57.50	-150.54	0.39	-0.27	-7.96	294.24
10,465.00	2.02	148.65	EM	5/17/2015	Native...	10,460.29	-175.47	59.22	-152.68	0.20	0.19	2.32	297.44
10,560.00	2.46	157.26	EM	5/17/2015	Native...	10,555.22	-178.78	60.88	-155.41	0.58	0.46	9.06	301.15
10,655.00	2.02	160.86	EM	5/17/2015	Native...	10,650.14	-182.24	62.21	-158.37	0.49	-0.46	3.79	304.86
10,750.00	1.80	153.13	EM	5/17/2015	Native...	10,745.09	-185.15	63.44	-160.84	0.36	-0.23	-8.14	308.02
10,845.00	2.02	157.70	EM	5/17/2015	Native...	10,840.04	-188.03	64.75	-163.26	0.28	0.23	4.81	311.18
10,940.00	2.15	169.30	EM	5/18/2015	Native...	10,934.98	-191.33	65.71	-166.17	0.46	0.14	12.21	314.62
11,035.00	2.41	174.49	EM	5/18/2015	Native...	11,029.90	-195.07	66.24	-169.62	0.35	0.27	5.46	318.39
11,130.00	3.20	173.43	EM	5/18/2015	Native...	11,124.79	-199.69	66.73	-173.94	0.83	0.83	-1.12	323.04
11,205.00	3.91	174.22	EM	5/18/2015	Native...	11,199.64	-204.32	67.23	-178.25	0.95	0.95	1.05	327.69
11,266.00	2.52	163.28	EM	5/19/2015	Native...	11,250.56	-207.12	67.73	-180.81	2.97	-2.73	-21.45	330.54
11,288.00	3.31	88.45	EM	5/19/2015	Native...	11,282.53	-207.77	68.85	-181.13	11.24	2.47	-233.84	331.84
11,320.00	4.40	39.92	EM	5/19/2015	Native...	11,314.46	-206.80	70.56	-179.73	10.37	3.41	-151.66	333.81
11,351.00	7.48	29.53	EM	5/19/2015	Native...	11,345.29	-204.13	72.32	-176.69	10.48	9.94	-33.52	337.00
11,414.00	14.12	27.66	EM	5/19/2015	Native...	11,407.14	-193.75	77.92	-165.17	10.55	10.54	-2.97	348.80
11,446.00	17.56	21.34	EM	5/20/2015	Native...	11,437.93	-185.79	81.49	-156.54	12.01	10.75	-19.75	357.52
11,477.00	20.13	20.19	EM	5/20/2015	Native...	11,467.26	-176.43	85.03	-146.56	8.38	8.29	-3.71	367.53
11,509.00	23.09	17.09	EM	5/20/2015	Native...	11,497.01	-165.26	88.78	-134.80	9.91	9.25	-9.69	379.31
11,541.00	27.00	13.80	EM	5/20/2015	Native...	11,526.00	-152.20	92.35	-121.26	12.97	12.22	-10.28	392.85
11,573.00	30.25	11.14	EM	5/20/2015	Native...	11,554.08	-137.23	95.64	-105.96	10.91	10.16	-8.31	408.18
11,604.00	33.85	8.76	EM	5/20/2015	Native...	11,580.36	-121.03	98.47	-89.60	12.30	11.61	-7.68	424.62
11,636.00	38.02	8.01	EM	5/20/2015	Native...	11,606.26	-102.46	101.20	-70.99	13.10	13.03	-2.34	443.40
11,668.00	41.58	7.80	EM	5/20/2015	Native...	11,630.84	-82.17	104.02	-50.70	11.13	11.13	-0.66	463.88
11,699.00	46.68	8.01	EM	5/20/2015	Native...	11,653.09	-60.80	106.99	-29.33	16.46	16.45	0.68	485.45
11,730.00	49.97	8.17	EM	5/20/2015	Native...	11,673.69	-37.88	110.24	-6.39	10.62	10.61	0.52	508.61
11,762.00	53.86	10.18	EM	5/20/2015	Native...	11,693.43	-13.02	114.27	18.62	13.12	12.16	6.28	533.79
11,794.00	57.75	11.45	EM	5/21/2015	Native...	11,711.41	12.97	119.24	44.99	12.59	12.16	3.97	560.25
11,826.00	62.29	10.60	EM	5/21/2015	Native...	11,727.40	40.17	124.54	72.60	14.37	14.19	-2.66	587.96
11,857.00	65.71	10.65	EM	5/21/2015	Native...	11,740.99	67.55	129.67	100.34	11.03	11.03	0.16	615.82
11,889.00	67.40	9.98	EM	5/21/2015	Native...	11,753.72	96.43	134.93	129.56	5.62	5.28	-2.09	645.17
11,921.00	69.20	10.94	EM	5/21/2015	Native...	11,765.55	125.67	140.33	159.16	6.28	5.62	3.00	674.90
11,952.00	70.57	10.81	EM	5/21/2015	Native...	11,776.21	154.25	145.82	188.16	4.44	4.42	-0.42	704.01
11,984.00	71.85	11.39	EM	5/21/2015	Native...	11,786.52	183.98	151.65	218.36	4.35	4.00	1.81	734.31
12,015.00	72.61	12.30	EM	5/22/2015	Native...	11,795.98	212.87	157.71	247.81	3.72	2.45	2.94	763.83
12,047.00	74.25	12.44	EM	5/22/2015	Native...	11,805.10	242.83	164.28	278.42	5.14	5.13	0.44	794.50
12,079.00	78.20	12.24	EM	5/22/2015	Native...	11,812.72	273.19	170.92	309.44	12.36	12.34	-0.62	825.57
12,110.00	81.61	14.32	EM	5/22/2015	Native...	11,818.16	302.88	177.94	339.92	12.83	11.00	6.71	856.08
12,165.00	83.60	15.10	MWD	5/28/2015	Native...	11,825.23	355.64	191.79	394.45	3.88	3.62	1.42	910.62



Directional Survey

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30

Survey Data

MD (ft, KB)	Incl (°)	Azm (°)	Tool Type	Date	Survey Company	TVD (ft, KB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)	Traverse Distance (ft)
12,196.00	83.70	15.10	MWD	5/28/2015	Native...	11,828.66	385.38	199.81	425.26	0.32	0.32	0.00	941.43
12,228.00	83.90	15.60	MWD	5/28/2015	Native...	11,832.12	416.06	208.23	457.07	1.67	0.63	1.56	973.25
12,259.00	84.10	15.50	MWD	5/28/2015	Native...	11,835.36	445.76	216.50	487.90	0.72	0.65	-0.32	1,004.08
12,291.00	84.09	15.55	MWD	5/28/2015	Native...	11,838.65	476.43	225.02	519.73	0.16	-0.03	0.16	1,035.91
12,322.00	84.38	16.18	MWD	5/28/2015	Native...	11,841.77	506.10	233.45	550.57	2.23	0.94	2.03	1,066.75
12,354.00	84.44	15.82	MWD	5/28/2015	Native...	11,844.88	536.71	242.23	582.42	1.14	0.19	-1.13	1,098.60
12,385.00	85.24	15.93	MWD	5/28/2015	Native...	11,847.67	566.41	250.67	613.29	2.60	2.58	0.35	1,129.47
12,417.00	86.01	15.75	MWD	5/28/2015	Native...	11,850.11	597.10	259.38	645.20	2.47	2.41	-0.56	1,161.38
12,449.00	87.66	14.76	MWD	5/30/2015	Native...	11,851.88	627.93	267.79	677.15	6.01	5.16	-3.09	1,193.33
12,480.00	88.33	14.95	MWD	5/30/2015	Native...	11,852.96	657.87	275.73	708.12	2.25	2.16	0.61	1,224.31
12,511.00	88.64	14.90	MWD	5/30/2015	Native...	11,853.78	687.82	283.71	739.11	1.01	1.00	-0.16	1,255.30
12,542.00	88.51	14.73	MWD	5/30/2015	Native...	11,854.55	717.78	291.64	770.09	0.69	-0.42	-0.55	1,286.29
12,574.00	89.80	15.95	MWD	5/30/2015	Native...	11,855.03	748.63	300.10	802.09	5.55	4.03	3.81	1,318.28
12,605.00	87.84	14.62	MWD	5/30/2015	Native...	11,855.66	778.53	308.27	833.08	7.64	-6.32	-4.29	1,349.27
12,636.00	89.55	16.95	MWD	5/30/2015	Native...	11,856.37	808.35	316.70	864.07	9.32	5.52	7.52	1,380.26
12,667.00	90.63	17.71	MWD	5/30/2015	Native...	11,856.32	837.94	325.94	895.06	4.26	3.48	2.45	1,411.26
12,699.00	90.33	17.90	MWD	5/30/2015	Native...	11,856.05	868.40	335.72	927.03	1.11	-0.94	0.59	1,443.26
12,730.00	89.29	17.05	MWD	5/31/2015	Native...	11,856.16	897.97	345.03	958.02	4.33	-3.35	-2.74	1,474.26
12,761.00	88.56	16.19	MWD	5/31/2015	Native...	11,856.74	927.67	353.89	989.01	3.64	-2.35	-2.77	1,505.25
12,793.00	88.55	16.76	MWD	5/31/2015	Native...	11,857.54	958.35	362.97	1,021.00	1.78	-0.03	1.78	1,537.24
12,816.00	87.44	16.17	MWD	6/1/2015	Native...	11,858.35	980.39	369.48	1,043.98	5.46	-4.83	-2.57	1,560.23
12,847.00	86.79	16.55	MWD	6/1/2015	Native...	11,859.91	1,010.10	378.20	1,074.94	2.43	-2.10	1.23	1,591.19
12,879.00	86.76	16.51	MWD	6/1/2015	Native...	11,861.71	1,040.73	387.29	1,106.89	0.16	-0.09	-0.12	1,623.14
12,910.00	87.84	17.05	MWD	6/1/2015	Native...	11,863.17	1,070.37	396.23	1,137.85	3.89	3.48	1.74	1,654.10
12,941.00	87.02	16.71	MWD	6/1/2015	Native...	11,864.56	1,100.01	405.22	1,168.81	2.86	-2.65	-1.10	1,685.07
12,973.00	88.07	17.67	MWD	6/2/2015	Native...	11,865.93	1,130.55	414.67	1,200.77	4.44	3.28	3.00	1,717.04
13,005.00	88.41	17.31	MWD	6/2/2015	Native...	11,866.91	1,161.06	424.28	1,232.75	1.55	1.06	-1.13	1,749.03
13,036.00	87.50	16.30	MWD	6/2/2015	Native...	11,868.02	1,190.71	433.24	1,263.72	4.38	-2.94	-3.26	1,780.01
13,067.00	86.22	16.14	MWD	6/2/2015	Native...	11,869.72	1,220.43	441.89	1,294.67	4.16	-4.13	-0.52	1,810.96
13,076.00	86.04	15.77	MWD	6/3/2015	Native...	11,870.32	1,229.07	444.36	1,303.65	4.56	-2.00	-4.11	1,819.94
13,108.00	85.98	16.35	MWD	6/3/2015	Native...	11,872.55	1,259.74	453.19	1,335.57	1.82	-0.19	1.81	1,851.86
13,139.00	88.61	15.82	MWD	6/3/2015	Native...	11,874.01	1,289.49	461.77	1,366.54	8.65	8.48	-1.71	1,882.82
13,171.00	89.90	14.89	MWD	6/3/2015	Native...	11,874.43	1,320.35	470.24	1,398.53	4.97	4.03	-2.91	1,914.82
13,202.00	90.30	14.62	MWD	6/3/2015	Native...	11,874.38	1,350.33	478.13	1,429.53	1.56	1.29	-0.87	1,945.82
13,233.00	89.14	14.81	MWD	6/3/2015	Native...	11,874.53	1,380.31	486.01	1,460.52	3.79	-3.74	0.61	1,976.82
13,265.00	87.59	14.07	MWD	6/3/2015	Native...	11,875.44	1,411.28	493.98	1,492.50	5.37	-4.84	-2.31	2,008.80
13,296.00	86.88	12.82	MWD	6/3/2015	Native...	11,876.94	1,441.40	501.18	1,523.43	4.63	-2.29	-4.03	2,039.77
13,328.00	87.80	14.46	MWD	6/3/2015	Native...	11,878.42	1,472.46	508.72	1,555.37	5.87	2.88	5.13	2,071.73
13,359.00	88.49	15.85	MWD	6/3/2015	Native...	11,879.43	1,502.37	516.82	1,586.35	5.00	2.23	4.48	2,102.71
13,391.00	89.34	17.56	MWD	6/3/2015	Native...	11,880.03	1,533.01	526.02	1,618.34	5.97	2.66	5.34	2,134.71
13,422.00	89.84	17.30	MWD	6/3/2015	Native...	11,880.25	1,562.58	535.30	1,649.33	1.82	1.61	-0.84	2,165.71
13,453.00	89.16	15.50	MWD	6/3/2015	Native...	11,880.52	1,592.32	544.05	1,680.33	6.21	-2.19	-5.81	2,196.70
13,485.00	90.70	17.86	MWD	6/3/2015	Native...	11,880.56	1,622.97	553.24	1,712.32	8.81	4.81	7.38	2,228.70
13,516.00	91.22	17.12	MWD	6/3/2015	Native...	11,880.04	1,652.53	562.55	1,743.30	2.92	1.68	-2.39	2,259.70
13,547.00	90.94	16.05	MWD	6/3/2015	Native...	11,879.46	1,682.24	571.40	1,774.29	3.57	-0.90	-3.45	2,290.69
13,579.00	90.83	16.03	MWD	6/3/2015	Native...	11,878.96	1,712.99	580.24	1,806.29	0.35	-0.34	-0.06	2,322.69
13,610.00	89.67	15.77	MWD	6/3/2015	Native...	11,878.83	1,742.80	588.73	1,837.29	3.83	-3.74	-0.84	2,353.69
13,642.00	89.09	15.47	MWD	6/4/2015	Native...	11,879.18	1,773.62	597.35	1,869.28	2.04	-1.81	-0.94	2,385.68
13,673.00	86.78	15.29	MWD	6/4/2015	Native...	11,880.29	1,803.49	605.57	1,900.26	7.47	-7.45	-0.58	2,416.66
13,705.00	86.86	15.34	MWD	6/4/2015	Native...	11,882.07	1,834.30	614.00	1,932.21	0.29	0.25	0.16	2,448.61
13,736.00	86.15	15.34	MWD	6/4/2015	Native...	11,883.96	1,864.14	622.19	1,963.15	2.29	-2.29	0.00	2,479.55



Directional Survey

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30

Survey Data													
MD (ft. KB)	Incl (°)	Azm (°)	Tool Type	Date	Survey Company	TVD (ft. KB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)	Traverse Distance (ft)
13,767.00	85.30	15.62	MWD	6/5/2015	Native...	11,886.27	1,893.93	630.44	1,994.07	2.89	-2.74	0.90	2,510.47
13,799.00	84.74	15.64	MWD	6/5/2015	Native...	11,889.05	1,924.63	639.03	2,025.94	1.75	-1.75	0.06	2,542.35
13,830.00	85.42	14.80	MWD	6/5/2015	Native...	11,891.70	1,954.44	647.14	2,056.83	3.48	2.19	-2.71	2,573.23
13,861.00	86.77	14.14	MWD	6/6/2015	Native...	11,893.82	1,984.38	654.87	2,087.75	4.85	4.35	-2.13	2,604.16
13,893.00	87.28	13.29	MWD	6/6/2015	Native...	11,895.48	2,015.43	662.44	2,119.68	3.09	1.59	-2.66	2,636.12
13,924.00	87.02	13.41	MWD	6/6/2015	Native...	11,897.02	2,045.55	669.59	2,150.61	0.92	-0.84	0.39	2,667.08
13,956.00	88.53	13.12	MWD	6/6/2015	Native...	11,898.26	2,076.67	676.93	2,182.56	4.80	4.72	-0.91	2,699.05
13,987.00	89.54	13.93	MWD	6/6/2015	Native...	11,898.78	2,106.81	684.18	2,213.53	4.18	3.26	2.61	2,730.05
14,019.00	90.51	14.67	MWD	6/6/2015	Native...	11,898.77	2,137.82	692.08	2,245.52	3.81	3.03	2.31	2,762.05
14,050.00	89.40	13.93	MWD	6/7/2015	Native...	11,898.79	2,167.86	699.74	2,276.50	4.30	-3.58	-2.39	2,793.05
14,081.00	88.75	13.24	MWD	6/7/2015	Native...	11,899.29	2,197.98	707.02	2,307.48	3.06	-2.10	-2.23	2,824.04
14,113.00	90.05	11.64	MWD	6/7/2015	Native...	11,899.63	2,229.23	713.91	2,339.42	6.44	4.06	-5.00	2,856.04
14,145.00	91.95	10.98	MWD	6/7/2015	Native...	11,899.07	2,260.60	720.18	2,371.31	6.29	5.94	-2.06	2,888.03
14,176.00	92.82	10.79	MWD	6/7/2015	Native...	11,897.78	2,291.02	726.03	2,402.17	2.87	2.81	-0.61	2,919.00
14,207.00	93.60	10.51	MWD	6/8/2015	Native...	11,896.04	2,321.44	731.75	2,432.99	2.67	2.52	-0.90	2,949.96
14,239.00	93.09	10.80	MWD	6/8/2015	Native...	11,894.18	2,352.83	737.66	2,464.81	1.83	-1.59	0.91	2,981.90
14,262.00	93.12	11.23	MWD	6/9/2015	Native...	11,892.93	2,375.37	742.05	2,487.70	1.87	0.13	1.87	3,004.87
14,293.00	93.16	11.51	MWD	6/9/2015	Native...	11,891.23	2,405.72	748.15	2,518.56	0.91	0.13	0.90	3,035.82
14,325.00	92.62	11.95	MWD	6/9/2015	Native...	11,889.62	2,437.01	754.65	2,550.43	2.18	-1.69	1.38	3,067.78
14,356.00	92.58	12.13	MWD	6/9/2015	Native...	11,888.21	2,467.30	761.11	2,581.33	0.59	-0.13	0.58	3,098.75
14,387.00	91.24	12.03	MWD	6/10/2015	Native...	11,887.18	2,497.59	767.59	2,612.25	4.33	-4.32	-0.32	3,129.73
14,418.00	91.22	11.84	MWD	6/10/2015	Native...	11,886.51	2,527.92	774.00	2,643.17	0.62	-0.06	-0.61	3,160.72
14,450.00	91.47	12.16	MWD	6/12/2015	Native...	11,885.76	2,559.21	780.65	2,675.09	1.27	0.78	1.00	3,192.71
14,482.00	90.15	11.80	MWD	6/12/2015	Native...	11,885.31	2,590.51	787.29	2,707.02	4.28	-4.12	-1.13	3,224.71
14,513.00	89.54	11.98	MWD	6/12/2015	Native...	11,885.40	2,620.84	793.68	2,737.94	2.05	-1.97	0.58	3,255.71
14,544.00	89.93	11.89	MWD	6/12/2015	Native...	11,885.54	2,651.17	800.09	2,768.87	1.29	1.26	-0.29	3,286.71
14,576.00	91.08	11.98	MWD	6/13/2015	Native...	11,885.26	2,682.48	806.71	2,800.80	3.60	3.59	0.28	3,318.71
14,607.00	91.60	11.63	MWD	6/13/2015	Native...	11,884.53	2,712.81	813.05	2,831.71	2.02	1.68	-1.13	3,349.70
14,639.00	92.04	12.24	MWD	6/13/2015	Native...	11,883.52	2,744.11	819.66	2,863.62	2.35	1.38	1.91	3,381.68
14,670.00	91.78	12.33	MWD	6/14/2015	Native...	11,882.48	2,774.38	826.26	2,894.55	0.89	-0.84	0.29	3,412.66
14,702.00	90.46	12.77	MWD	6/14/2015	Native...	11,881.86	2,805.61	833.21	2,926.49	4.35	-4.13	1.38	3,444.66
14,733.00	88.00	13.04	MWD	6/14/2015	Native...	11,882.27	2,835.82	840.13	2,957.44	7.98	-7.94	0.87	3,475.65
14,765.00	85.85	13.04	MWD	6/14/2015	Native...	11,883.99	2,866.95	847.34	2,989.36	6.72	-6.72	0.00	3,507.60
14,797.00	85.67	12.68	MWD	6/15/2015	Native...	11,886.36	2,898.06	854.44	3,021.22	1.26	-0.56	-1.13	3,539.52
14,828.00	89.49	13.21	MWD	6/15/2015	Native...	11,887.66	2,928.24	861.38	3,052.15	12.44	12.32	1.71	3,570.48
14,859.00	92.31	14.00	MWD	6/15/2015	Native...	11,887.18	2,958.36	868.67	3,083.12	9.45	9.10	2.55	3,601.48
14,891.00	94.07	14.71	MWD	6/15/2015	Native...	11,885.40	2,989.31	876.59	3,115.06	5.93	5.50	2.22	3,633.43
14,922.00	93.71	14.79	MWD	6/15/2015	Native...	11,883.29	3,019.22	884.46	3,145.98	1.19	-1.16	0.26	3,664.35
14,954.00	91.34	14.00	MWD	6/17/2015	Native...	11,881.88	3,050.19	892.41	3,177.94	7.81	-7.41	-2.47	3,696.32
14,995.00	90.11	13.74	MWD	6/18/2015	Native...	11,881.37	3,089.99	902.24	3,218.91	3.07	-3.00	-0.63	3,737.32
15,026.00	90.81	14.27	MWD	6/18/2015	Native...	11,881.12	3,120.06	909.74	3,249.90	2.83	2.26	1.71	3,768.31
15,058.00	90.29	15.85	MWD	6/18/2015	Native...	11,880.81	3,150.96	918.05	3,281.89	5.20	-1.62	4.94	3,800.31
15,089.00	88.44	16.81	MWD	6/19/2015	Native...	11,881.15	3,180.71	926.77	3,312.89	6.72	-5.97	3.10	3,831.31
15,121.00	87.16	16.99	MWD	6/19/2015	Native...	11,882.38	3,211.30	936.07	3,344.86	4.04	-4.00	0.56	3,863.28
15,152.00	87.12	16.90	MWD	6/19/2015	Native...	11,883.93	3,240.92	945.09	3,375.81	0.32	-0.13	-0.29	3,894.25
15,184.00	87.03	16.64	MWD	6/19/2015	Native...	11,885.56	3,271.52	954.31	3,407.76	0.86	-0.28	-0.81	3,926.20
15,215.00	87.82	17.17	MWD	6/19/2015	Native...	11,886.95	3,301.15	963.32	3,438.73	3.07	2.55	1.71	3,957.17
15,247.00	89.54	17.69	MWD	6/19/2015	Native...	11,887.69	3,331.67	972.90	3,470.71	5.62	5.38	1.63	3,989.16
15,278.00	90.24	19.36	MWD	6/19/2015	Native...	11,887.75	3,361.06	982.75	3,501.67	5.84	2.26	5.39	4,020.16
15,309.00	90.37	20.86	MWD	6/19/2015	Native...	11,887.59	3,390.17	993.40	3,532.58	4.86	0.42	4.84	4,051.16
15,341.00	90.24	20.42	MWD	6/20/2015	Native...	11,887.41	3,420.12	1,004.68	3,564.47	1.43	-0.41	-1.37	4,083.16



Directional Survey

Well Name: RW 24-14A (GR)

API 43-047-53307	Surface Legal Location S14-T7S-R22E	Field Name RED WASH	County UINTAH	State UTAH	Well Configuration Type Vertical	
Unique Well ID UT100224	Ground Elevation (ft) 5,269.1	Casing Flange Elevation (ft) 5,269.10	Current KB to GL (ft) 30.00	KB to CF (ft) 30.00	Spud Date 4/7/2015 08:00	Dry Hole TD Date 7/4/2015 01:30

Survey Data

MD (ft. KB)	Incl (°)	Azm (°)	Tool Type	Date	Survey Company	TVD (ft. KB)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Build (°/100ft)	Turn (°/100ft)	Traverse Distance (ft)
15,373.00	89.54	20.42	MWD	6/20/2015	Native...	11,887.48	3,450.11	1,015.85	3,596.36	2.19	-2.19	0.00	4,115.16
15,404.00	87.38	19.89	MWD	6/20/2015	Native...	11,888.31	3,479.20	1,026.53	3,627.26	7.17	-6.97	-1.71	4,146.15
15,436.00	85.41	19.19	MWD	6/20/2015	Native...	11,890.32	3,509.29	1,037.21	3,659.13	6.53	-6.16	-2.19	4,178.08
15,467.00	84.75	17.25	MWD	6/20/2015	Native...	11,892.98	3,538.63	1,046.86	3,689.99	6.59	-2.13	-6.26	4,208.96
15,498.00	84.48	15.94	MWD	6/20/2015	Native...	11,895.89	3,568.20	1,055.68	3,720.85	4.30	-0.87	-4.23	4,239.83
15,529.00	85.58	15.14	MWD	6/21/2015	Native...	11,898.58	3,597.96	1,063.95	3,751.73	4.38	3.55	-2.58	4,270.71
15,561.00	84.00	13.04	MWD	6/21/2015	Native...	11,901.48	3,628.86	1,071.71	3,783.58	8.19	-4.94	-6.56	4,302.57
15,592.00	86.29	11.89	MWD	6/22/2015	Native...	11,904.10	3,659.02	1,078.38	3,814.41	8.26	7.39	-3.71	4,333.46
15,623.00	89.98	11.80	MWD	6/22/2015	Native...	11,905.11	3,689.34	1,084.73	3,845.32	11.91	11.90	-0.29	4,364.44
15,655.00	92.84	13.74	MWD	6/22/2015	Native...	11,904.33	3,720.54	1,091.80	3,877.26	10.80	8.94	6.06	4,396.42
15,686.00	92.92	13.39	MWD	6/22/2015	Native...	11,902.77	3,750.63	1,099.07	3,908.19	1.16	0.26	-1.13	4,427.39
15,718.00	92.79	12.51	MWD	6/23/2015	Native...	11,901.17	3,781.78	1,106.23	3,940.11	2.78	-0.41	-2.75	4,459.35
15,749.00	92.79	11.37	MWD	6/23/2015	Native...	11,899.67	3,812.07	1,112.63	3,971.00	3.67	0.00	-3.68	4,490.31
15,781.00	90.86	11.36	MWD	6/23/2015	Native...	11,898.65	3,843.43	1,118.94	4,002.89	6.03	-6.03	-0.03	4,522.29
15,812.00	89.89	10.93	MWD	6/24/2015	Native...	11,898.44	3,873.84	1,124.93	4,033.79	3.42	-3.13	-1.39	4,553.29
15,846.00	89.23	11.37	MWD	6/25/2015	Native...	11,898.70	3,907.20	1,131.50	4,067.67	2.33	-1.94	1.29	4,587.29
15,877.00	87.30	10.84	MWD	6/25/2015	Native...	11,899.64	3,937.60	1,137.47	4,098.55	6.46	-6.23	-1.71	4,618.27
15,908.00	86.64	10.31	MWD	6/26/2015	Native...	11,901.28	3,968.03	1,143.15	4,129.38	2.73	-2.13	-1.71	4,649.23
15,940.00	87.96	10.05	MWD	6/26/2015	Native...	11,902.79	3,999.49	1,148.80	4,161.19	4.20	4.12	-0.81	4,681.19
15,971.00	88.48	10.57	MWD	6/26/2015	Native...	11,903.75	4,029.98	1,154.35	4,192.03	2.37	1.68	1.68	4,712.18
16,002.00	86.90	10.05	MWD	6/26/2015	Native...	11,905.00	4,060.45	1,159.89	4,222.86	5.37	-5.10	-1.68	4,743.15
16,034.00	86.42	9.87	MWD	6/27/2015	Native...	11,906.87	4,091.92	1,165.42	4,254.64	1.60	-1.50	-0.56	4,775.10
16,065.00	86.95	9.78	MWD	6/27/2015	Native...	11,908.66	4,122.41	1,170.70	4,285.42	1.73	1.71	-0.29	4,806.04
16,097.00	88.57	10.13	MWD	6/28/2015	Native...	11,909.91	4,153.90	1,176.22	4,317.22	5.18	5.06	1.09	4,838.02
16,128.00	86.55	9.96	MWD	6/28/2015	Native...	11,911.23	4,184.40	1,181.63	4,348.04	6.54	-6.52	-0.55	4,868.99
16,147.00	85.47	10.31	MWD	6/29/2015	Native...	11,912.55	4,203.06	1,184.96	4,366.90	5.97	-5.68	1.84	4,887.94
16,181.00	85.23	9.60	MWD	6/29/2015	Native...	11,915.31	4,236.43	1,190.82	4,400.61	2.20	-0.71	-2.09	4,921.83
16,213.00	85.40	9.28	MWD	6/30/2015	Native...	11,917.92	4,267.90	1,196.05	4,432.30	1.13	0.53	-1.00	4,953.72
16,244.00	87.23	7.52	MWD	6/30/2015	Native...	11,919.91	4,298.50	1,200.57	4,462.98	8.18	5.90	-5.68	4,984.66
16,275.00	87.72	7.41	MWD	7/1/2015	Native...	11,921.28	4,329.20	1,204.59	4,493.62	1.62	1.58	-0.35	5,015.63
16,307.00	87.28	7.25	MWD	7/1/2015	Native...	11,922.68	4,360.91	1,208.67	4,525.24	1.46	-1.37	-0.50	5,047.60
16,338.00	87.35	7.86	MWD	7/1/2015	Native...	11,924.13	4,391.61	1,212.74	4,555.88	1.98	0.23	1.97	5,078.56
16,369.00	87.58	8.10	MWD	7/2/2015	Native...	11,925.50	4,422.28	1,217.04	4,586.56	1.07	0.74	0.77	5,109.53
16,401.00	87.52	7.42	MWD	7/2/2015	Native...	11,926.87	4,453.96	1,221.36	4,618.22	2.13	-0.19	-2.13	5,141.50
16,432.00	87.48	7.31	MWD	7/2/2015	Native...	11,928.22	4,484.67	1,225.33	4,648.85	0.38	-0.13	-0.35	5,172.47
16,673.00	87.48	7.31	Extrap.	7/2/2015	Native...	11,938.82	4,723.48	1,255.96	4,886.97	0.00	0.00	0.00	5,413.24