

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPLICATE\*

FORM APPROVED  
OMB NO. 1040-0136  
Expires: February 28, 1995

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

TYPE OF WORK	
DRILL <input checked="" type="checkbox"/>	DEEPEEN <input type="checkbox"/>
TYPE OF WELL	
<input type="checkbox"/> OIL WELL	<input checked="" type="checkbox"/> GAS WELL
<input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> SINGLE ZONE
	<input type="checkbox"/> MULTIPLE ZONE

5. LEASE DESIGNATION AND SERIAL NO.

UTU-0807

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

UTE INDIAN TRIBE

7. UNIT AGREEMENT NAME

WONSITS VALLEY

8. FARM OR LEASE NAME, WELL NO.

WV 11AML-14-8-21

2. NAME OF OPERATOR  
QEP UINTA BASIN, INC.

Contact: Jan Nelson  
E-Mail: jan.nelson@questar.com

9. API NUMBER:  
43-047-38049

3. ADDRESS  
11002 E. 17500 S. Vernal, Ut 84078

Telephone number  
Phone 435-781-4331 Fax 435-781-4323

10. FIELD AND POOL, OR WILDCAT  
WONSITS VALLEY 710

4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements\*)  
At Surface 626043X 2601' FSL 2611' FEL NWSE SECTION 14, T8S, R21E  
At proposed production zone 4442304Y 40.123508 - 109.520783

11. SEC., T, R, M, OR BLK & SURVEY OR AREA  
SEC. 14, T8S, R21E Mer SLB

14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE\*  
11 +/- FROM OURAY, UTAH

12. COUNTY OR PARISH  
Uintah

13. STATE  
UT

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.  
(also to nearest drig, unit line if any)  
2601' +/-

16. NO. OF ACRES IN LEASE  
1280.00

17. NO. OF ACRES ASSIGNED TO THIS WELL  
20

18. DISTANCE FROM PROPOSED location to nearest well, drilling, completed, applied for, on this lease, ft

19. PROPOSED DEPTH  
11,245'

20. BLM/BIA Bond No. on file  
ESB000024

21. ELEVATIONS (Show whether DF, RT, GR, ect.)  
4851.6' GR

22. DATE WORK WILL START  
ASAP

23. Estimated duration  
20 days

24. Attachments

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

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

SIGNED Jan Nelson Name (printed/typed) Jan Nelson

DATE 4-25-06

TITLE Regulatory Affairs

(This space for Federal or State office use)

PERMIT NO. 43-047-38049

APPROVAL DATE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY Bradley G. Hill TITLE BRADLEY G. HILL ENVIRONMENTAL MANAGER

DATE 05-04-06

\*See Instructions On Reverse Side

Title 18 U.S.C Section 1001, makes 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

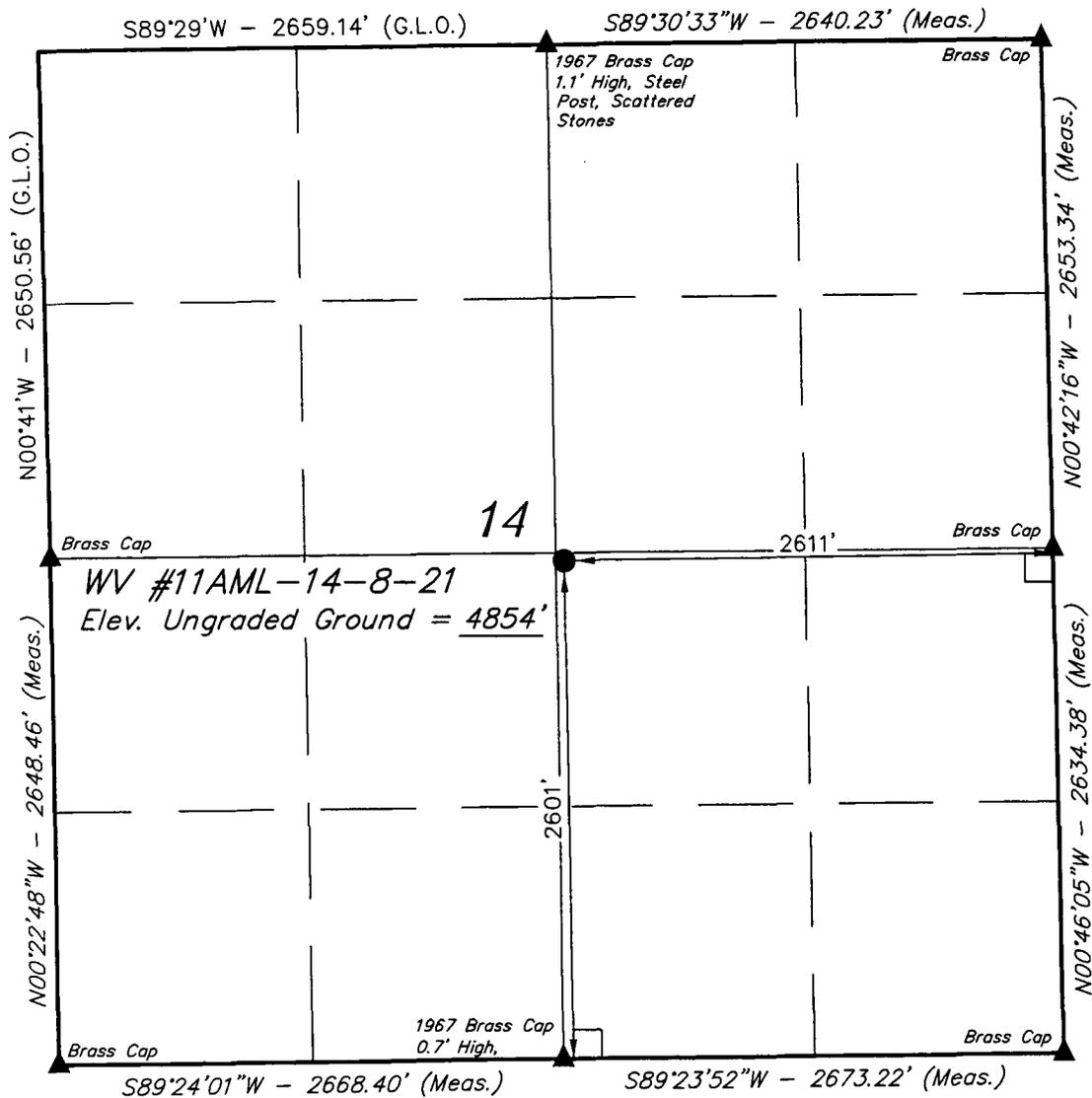
APR 28 2006

**Federal Approval of this  
Action is Necessary**

# T8S, R21E, S.L.B.&M.

## QUESTAR EXPLR. & PROD.

Well location, WV #11AML-14-8-21, located as shown in the NW 1/4 SE 1/4 of Section 14, T8S, R21E, S.L.B.&M. Uintah County, Utah.

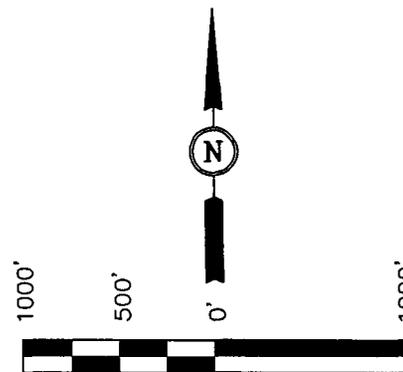


### BASIS OF ELEVATION

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.



SCALE

### 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.

*John H. Kay*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 161319  
 STATE OF UTAH

### LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(NAD 83)  
 LATITUDE = 40°07'24.54" (40.123483)  
 LONGITUDE = 109°31'17.03" (109.521397)  
 (NAD 27)  
 LATITUDE = 40°07'24.67" (40.123519)  
 LONGITUDE = 109°31'14.55" (109.520708)

### UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 12-19-05	DATE DRAWN: 02-28-06
PARTY D.A. C.F. P.M.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE QUESTAR EXPLR. & PROD.	

## **Additional Operator Remarks**

QEP Uinta Basin, Inc. proposes to drill a well to 11,245' to test the MesaVerde. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements"

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

Please be advised that QEP Uinta Basin Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No.ESB000024. The principal is QEP Uinta Basin Inc. via surety as consent as provided for the 43 CFR 3104.2.

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:

<b><u>Formation</u></b>	<b><u>Depth, TVD</u></b>
Uinta	Surface
Green River	2,675'
Wasatch	5,990'
Mesaverde	9,000'
Sego	11,195'
TD	11,245'

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:

<b><u>Substance</u></b>	<b><u>Formation</u></b>	<b><u>Depth, TVD</u></b>
Gas	Wasatch	5990'
Gas	Mesaverde	9000'

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 # A36125 (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 Red Wash Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

DRILLING PROGRAM

3. **Operator's Specification for Pressure Control Equipment:**

- A. 5,000 psi W.P. Double Gate BOP, 5,000 psi annular (schematic attached)
- B. Functional test daily
- C. All casing strings shall be pressure tested (0.22 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.
- D. 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.

4. **Casing Program**

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Wt.	Grade	Thread	Cond.
20"	14"	sfc	40'	Steel	Cond.	None	Used
12-1/4"	9-5/8"	sfc	450'	36.0	J-55	STC	New
8-3/4"	7"	sfc	7,500'	26.0	J-55	LTC	New
6-1/8"	4-1/2"	sfc	11,245'	11.6	P-110	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9-5/8"	36.0 lb.	J-55	STC	2,020 psi	3,520 psi	394,000 lb.
7"	26.0 lb.	J-55	LTC	4,320 psi	4,980 psi	367,000 lb.
4-1/2"	11.6 lb.	P-110	LTC	7,580 psi	10,690 psi	279,000 lb.

DRILLING PROGRAM

5. **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. If drilling with air the following will be used:
- G. The blooie line shall be at least 6” in diameter and extend at least 100’ from the well bore into the reserve/blooie pit.
- H. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500’).
- I. Compressor shall be tied directly to the blooie line through a manifold.
- J. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

Surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used, oil concentration will be less than 4% by volume. Maximum anticipated mud weight is 11.0 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

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

DRILLING PROGRAM

6. **Testing, logging and coring program**

- A. Cores – none anticipated
- B. DST – none anticipated
- C. Logging – Mud Logging – 1500' to TD  
GR-SP-Induction  
Neutron Density
- D. Formation and Completion Interval: Green River/Wasatch/MesaVerde interval, final determination of completion will be made by analysis of logs.  
Stimulation: Stimulation will be designed for the particular area of interest as encountered.

7. **Cementing Program**

**14" Conductor:**

Cement to surface with construction cement.

**9-5/8" Surface Casing: sfc - 450' (MD)**

**Lead/Tail Slurry:** 0' – 450'. 240 sks (280 cu ft) Premium AG cement + 2% CaCl<sub>2</sub> + 0.25 lb/sk celloflake. Slurry wt: 15.8 ppg, Slurry yield: 1.17 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

**7" Intermediate Casing: sfc - 7,500' (MD)**

**Lead Slurry:** 0' – 5,500'. 315 sks (1215 cu ft) Halliburton Hi-Fill cement. Slurry wt: 11.0 ppg, Slurry yield: 3.86 ft<sup>3</sup>/sk, Slurry volume: 8-3/4" hole + 50% excess in open hole section.

**Tail Slurry:** 5,500' – 7,500'. 365 sks (455 cu ft) of 50/50 Poz Premium AG + 2.0% Bentonite + 0.6% Halad (R)-322 fluid loss + 2.0% Microbond M expander + 5% salt + 0.25 lb/sk Flocele. Slurry wt: 14.35 ppg, Slurry yield: 1.24 ft<sup>3</sup>/sk, Slurry volume: 8-3/4" hole + 50% excess.

**4-1/2" Production Casing: sfc – 11,245' (MD)**

**Lead Slurry:** 0' - 5,500'. 150 sks (575 cu ft) Halliburton Hi-Fill cement + 16% Bentonite + 0.75% Econolite + 3% salt + 0.8% HR-7 retarder. Slurry wt: 11.0 ppg, Slurry yield: 3.84 ft<sup>3</sup>/sk, Slurry volume: 4-1/2" casing inside 7" casing.

**Tail Slurry:** 5,500' – 11,245'. 715 sks (885 cu ft) of 50/50 Poz Premium AG + 2.0% Bentonite + 0.6% Halad (R)-322 fluid loss + 2.0% Microbond M expander + 5% salt + 0.2% HR-5 retarder + 0.25 lb/sk Flocele. Slurry wt: 14.35 ppg, Slurry yield: 1.24 ft<sup>3</sup>/sk, Slurry volume: 6-1/8" hole + 20% excess in open hole section.

DRILLING PROGRAM

\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. 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.

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

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S 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 6430 psi. Maximum anticipated bottom hole temperature is 190° F.

9. Surface is owned by the Ute Indian Tribe.

5000 PSIG DIAGRAM

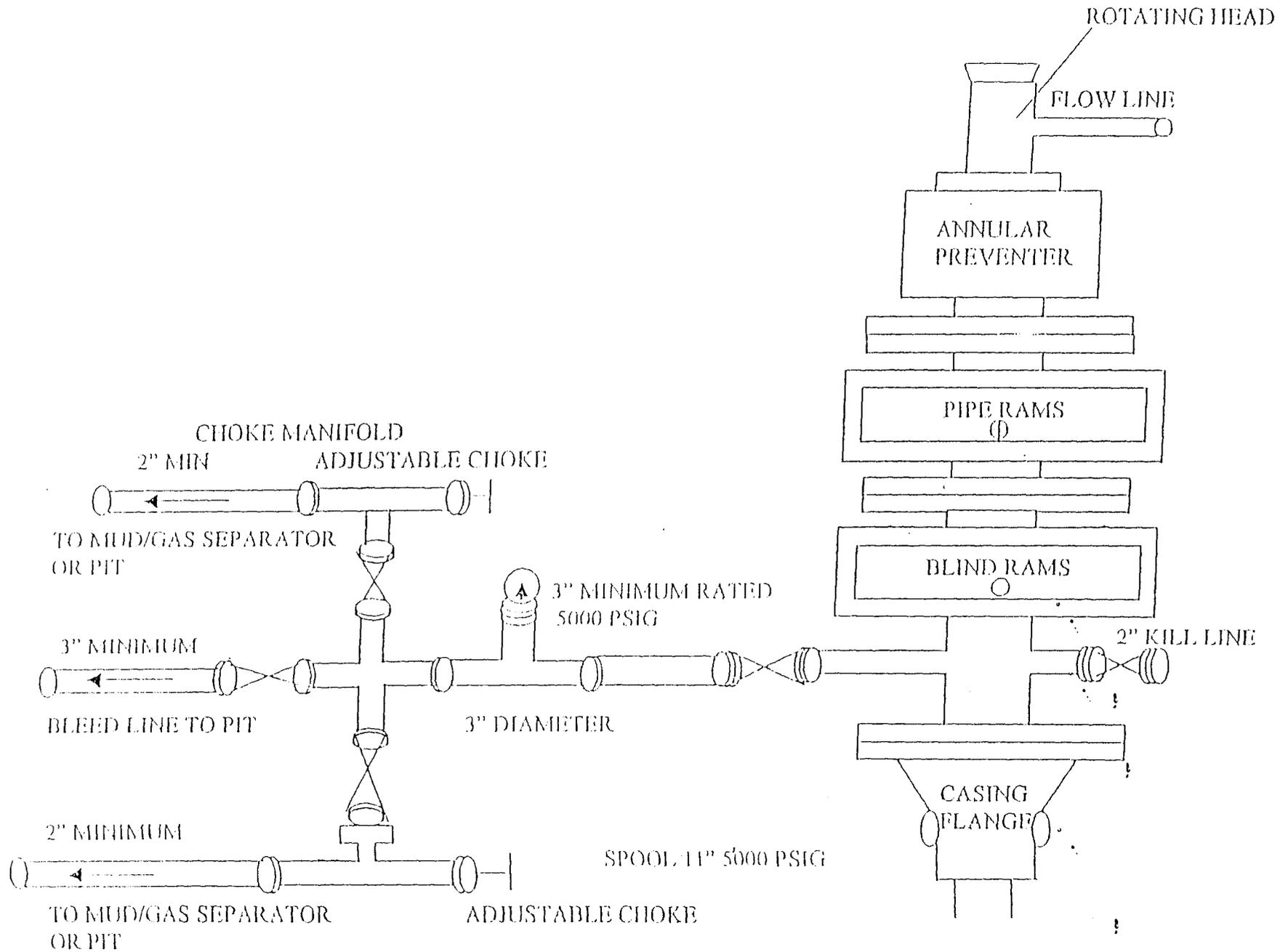
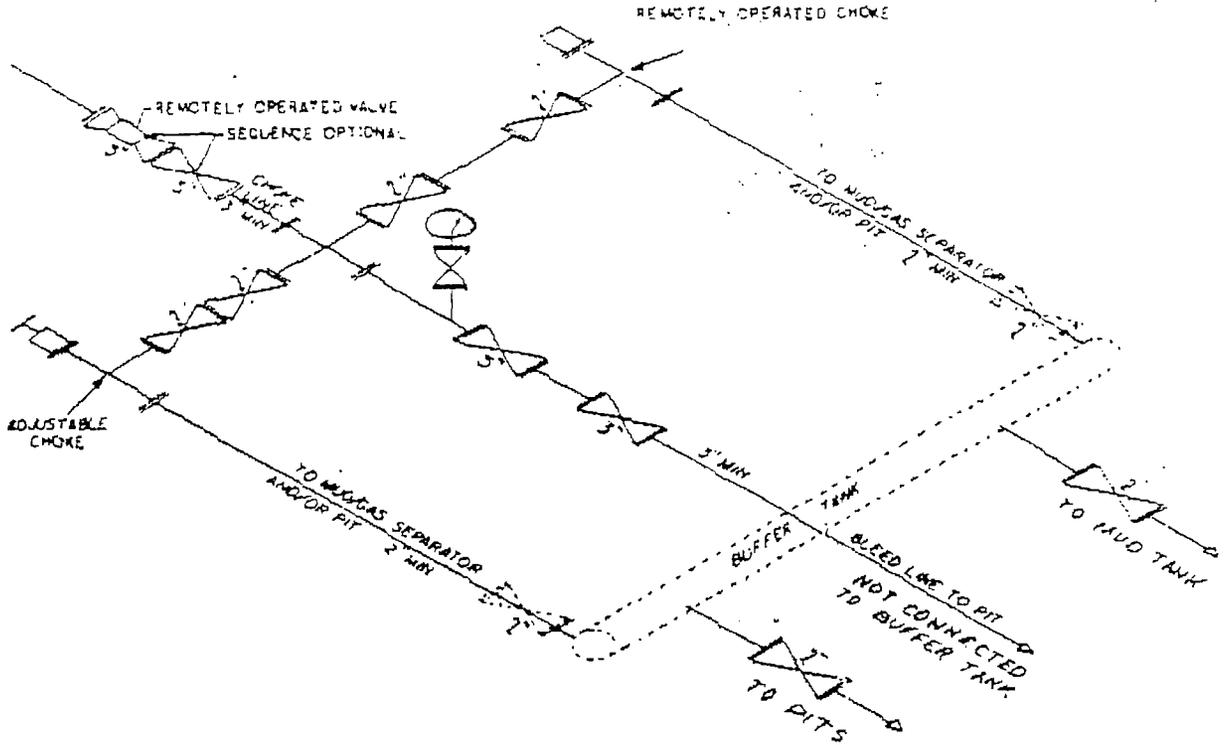


EXHIBIT B CONTINUED

Federal Register / Vol. 53, No. 221 / Friday, November 18, 1988 / Rules and Regulations

46813



② 5M CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

[FR Doc. 88-28738 Filed 11-17-88; 8:45 am]  
BILLING CODE 4310-04-C

**QEP UINTA BASIN, INC.  
WV 11AML-14-8-21  
2601' FSL 2611' FEL  
NWSE SECTION 14, T8S, R21E  
UINTAH COUNTY, UTAH  
LEASE # UTU-0807**

**ONSHORE ORDER NO. 1**

**1. Existing Roads:**

The proposed well site is approximately 11 from Ouray, Utah.

Refer to Topo Maps A and B for location of access roads within a 2 – mile radius.

There will be no improvements made to existing roads.

**2. Planned Access Roads:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

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

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

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

Refer to Topo Map D for the location of the proposed pipeline.

**5. Location and Type of Water Supply:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**6. Source of Construction Materials:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**7. Methods of Handling Waste Materials:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**8. Ancillary Facilities:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**9. Well Site Layout: (See Location Layout Diagram)**

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

A pit liner is required. A felt pit liner will be required if bedrock is encountered.

**10. Plans for Reclamation of the Surface:**

Please see QEP Uinta Basin, Inc. Standard Operating Practices dated October 18, 2005, for Mesa Verde Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and Undesignated fields in Townships 07, 08 and 09 South, Ranges 21 to 25 East.

**Interim Reclamation**

Please see attached Interim Reclamation plan.

Once the well is put onto production, QEP will reclaim as much of the well pad as possible that will allow for operations to continue in a safe and reasonable manner. Reseeding will be done in the spring or fall of every year to allow winter precipitation to aid in the success of reclamation.

**Seed Mix:**

*Interim Reclamation:*

9 lbs Hycrest Crested Wheatgrass

3lbs Forage Kochia

*Final Reclamation:*

Seed Mix # 1      3 lbs. Fourwing Saltbush, 3 lbs. Indian Rice Grass, 1 lb. Needle & Threadgrass and  
4 lbs. Hycrest Crested Wheat Grass

**11. Surface Ownership:**

Ute Indian Tribe  
P.O. Box 70  
FT Duchesne, UT 84026  
435-725-4040

**12. Other Information**

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

A class III paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted directly to the appropriate agencies by Stephen D. Sandau. The inspection results surveyed contained vertebrate fossils. Therefore, recommendations prior to any ground disturbance it suggested that all vertebrate fossil material be removed from the staked areas and placed outside of the areas where construction is proposed. Any fossil materials considered rare or of scientific value shall be collected and prepared under the direction of authorized member of the Ute Indian Tribe. QEP will provide paleo monitor during all construction.

**Lessee's or Operator's Representative:**

Jan Nelson  
Red Wash Rep.  
QEP Uinta Basin, Inc.  
11002 East 17500 South  
Vernal, Utah 84078  
(435) 781-4331

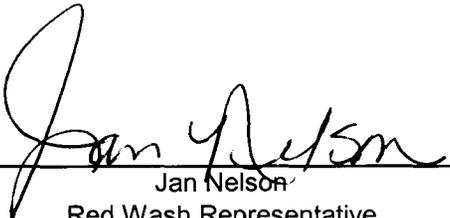
**Certification:**

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 & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

QEP Uinta Basin Inc. will be fully responsible for the actions of their 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.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by QEP Uinta Basin, Inc. it's contractors and subcontractors 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  
Red Wash Representative

\_\_\_\_\_  
25-Apr-06  
Date

# QUESTAR EXPLR. & PROD.

WV #11AML-14-8-21

LOCATED IN UINTAH COUNTY, UTAH

SECTION 14, T8S, R21E, S.L.B.&M.

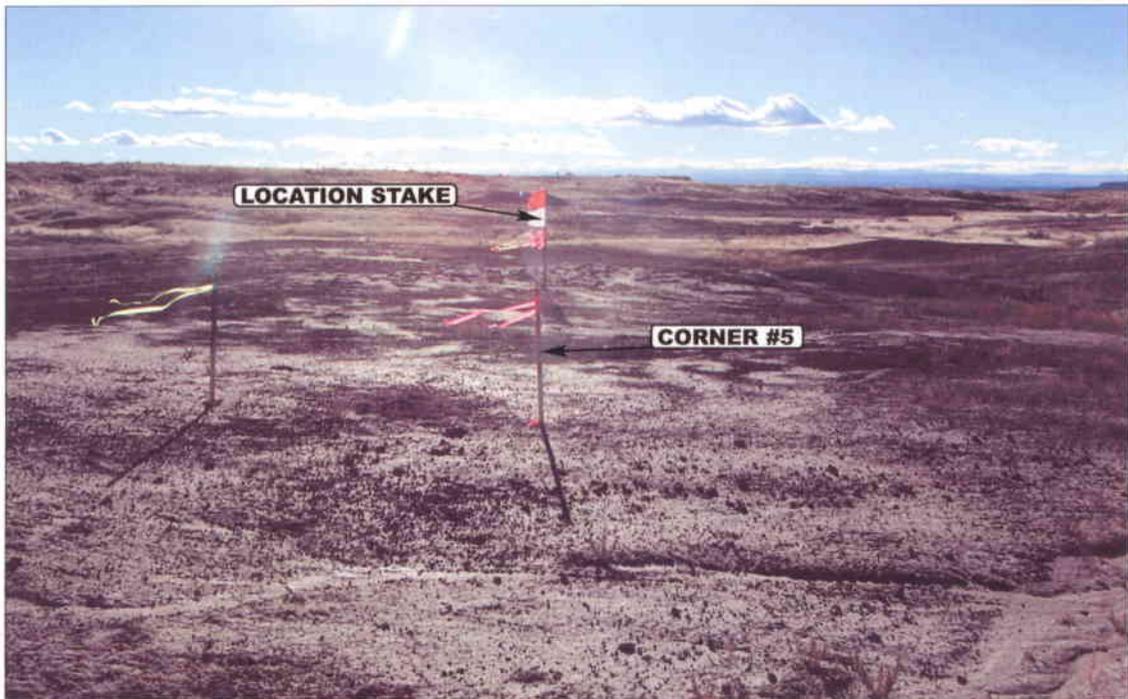


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHERLY



U  
E  
L  
S

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

- Since 1964 -

LOCATION PHOTOS

03 06 06  
MONTH DAY YEAR

PHOTO

TAKEN BY: D.A.

DRAWN BY: C.P.

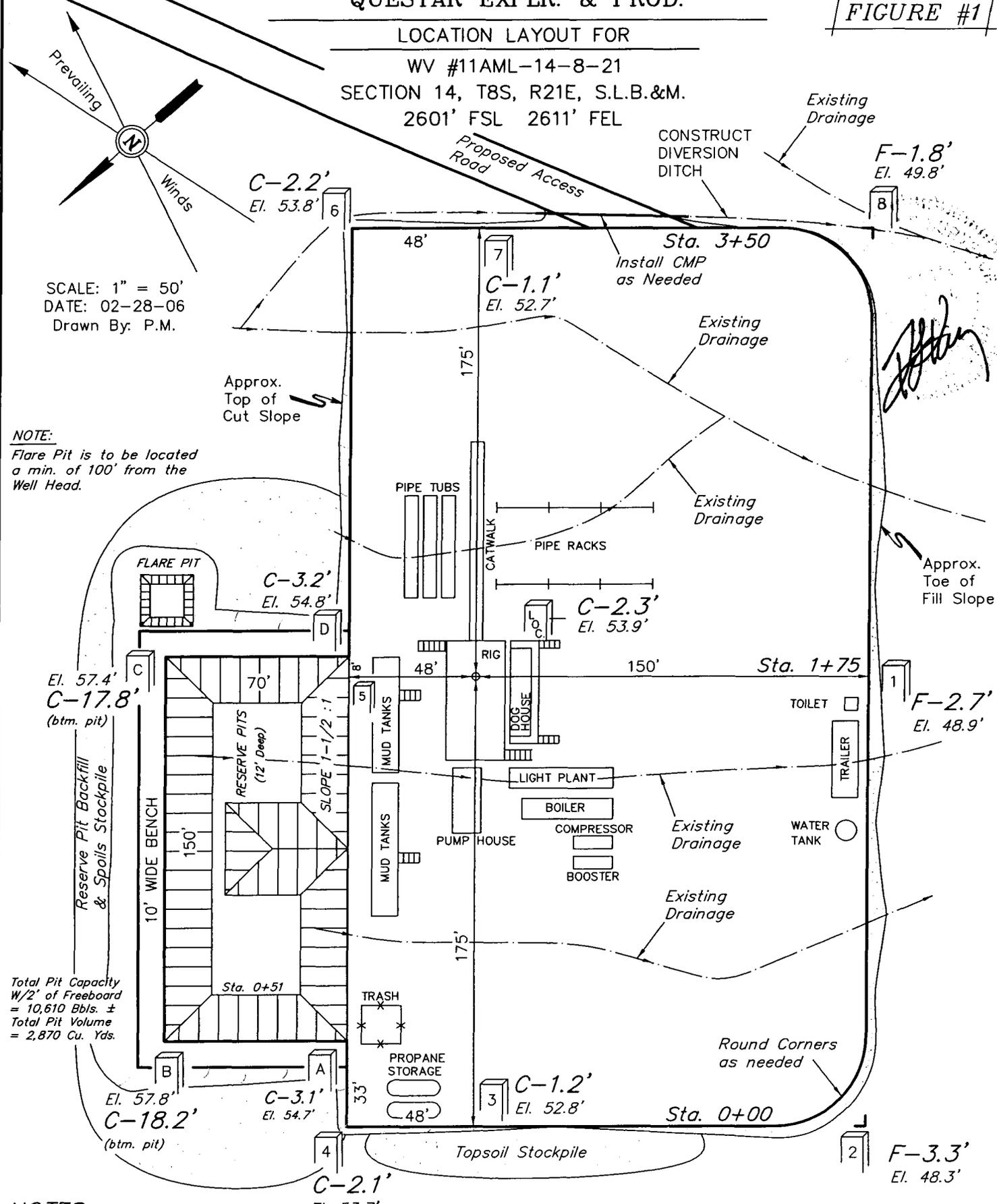
REVISED: 00-00-00

QUESTAR EXPLR. & PROD.

FIGURE #1

LOCATION LAYOUT FOR

WV #11AML-14-8-21  
SECTION 14, T8S, R21E, S.L.B.&M.  
2601' FSL 2611' FEL



SCALE: 1" = 50'  
DATE: 02-28-06  
Drawn By: P.M.

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

Total Pit Capacity  
W/2' of Freeboard  
= 10,610 Bbbls. ±  
Total Pit Volume  
= 2,870 Cu. Yds.

NOTES:

Elev. Ungraded Ground At Loc. Stake = 4853.9'  
FINISHED GRADE ELEV. AT LOC. STAKE = 4851.6'

QUESTAR EXPLR. & PROD.

FIGURE #2

TYPICAL CROSS SECTIONS FOR

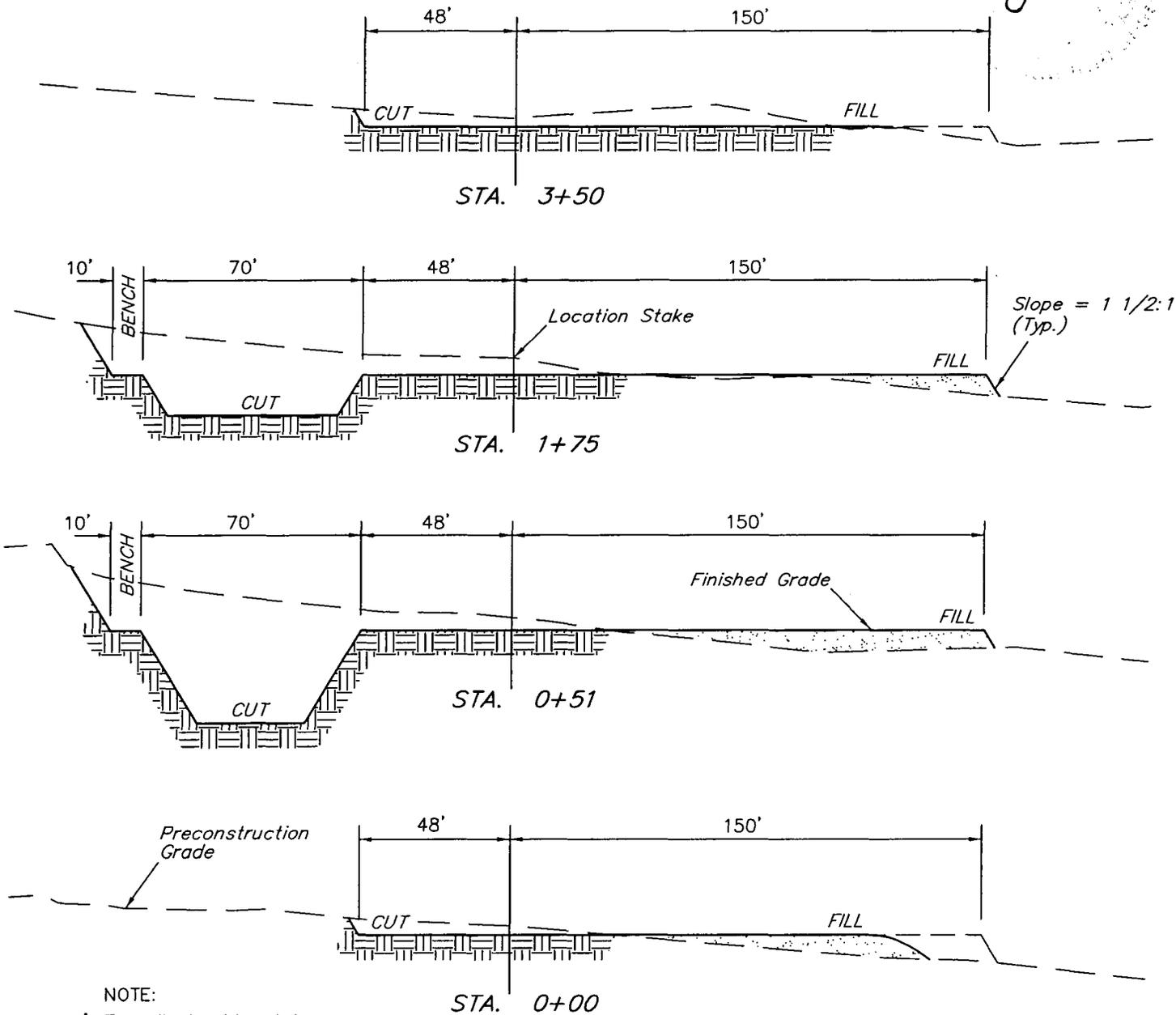
WV #11AML-14-8-21

SECTION 14, T8S, R21E, S.L.B.&M.

2601' FSL 2611' FEL

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

DATE: 02-28-06  
Drawn By: P.M.



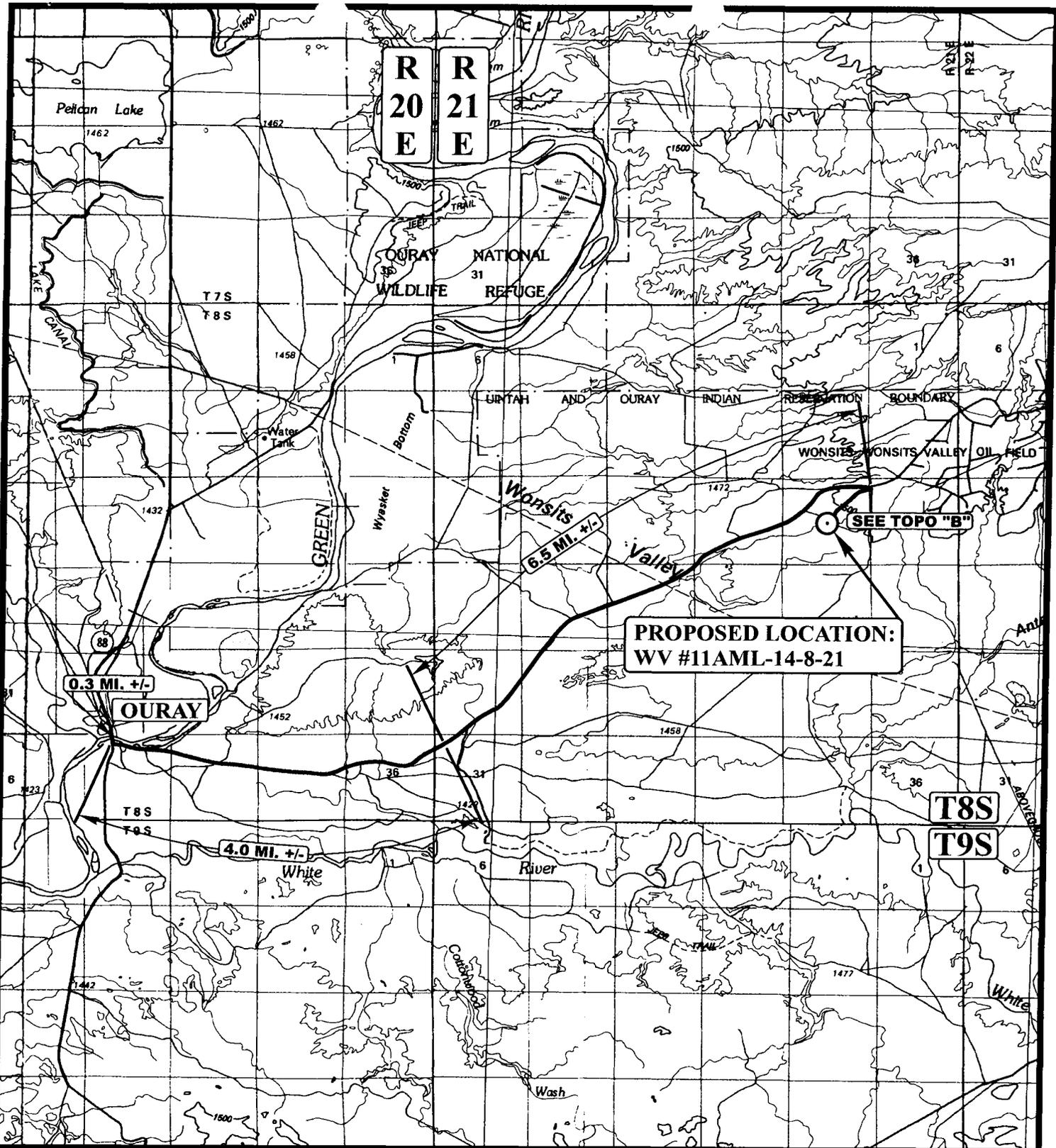
NOTE:  
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

\* NOTE:  
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

CUT	
(12") Topsoil Stripping	= 3,400 Cu. Yds.
Remaining Location	= 5,470 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 8,870 CU.YDS.</b>
<b>FILL</b>	<b>= 4,030 CU.YDS.</b>

EXCESS MATERIAL	= 4,840 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 4,840 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 0 Cu. Yds.



**LEGEND:**

⊙ PROPOSED LOCATION



**QUESTAR EXPLR. & PROD.**

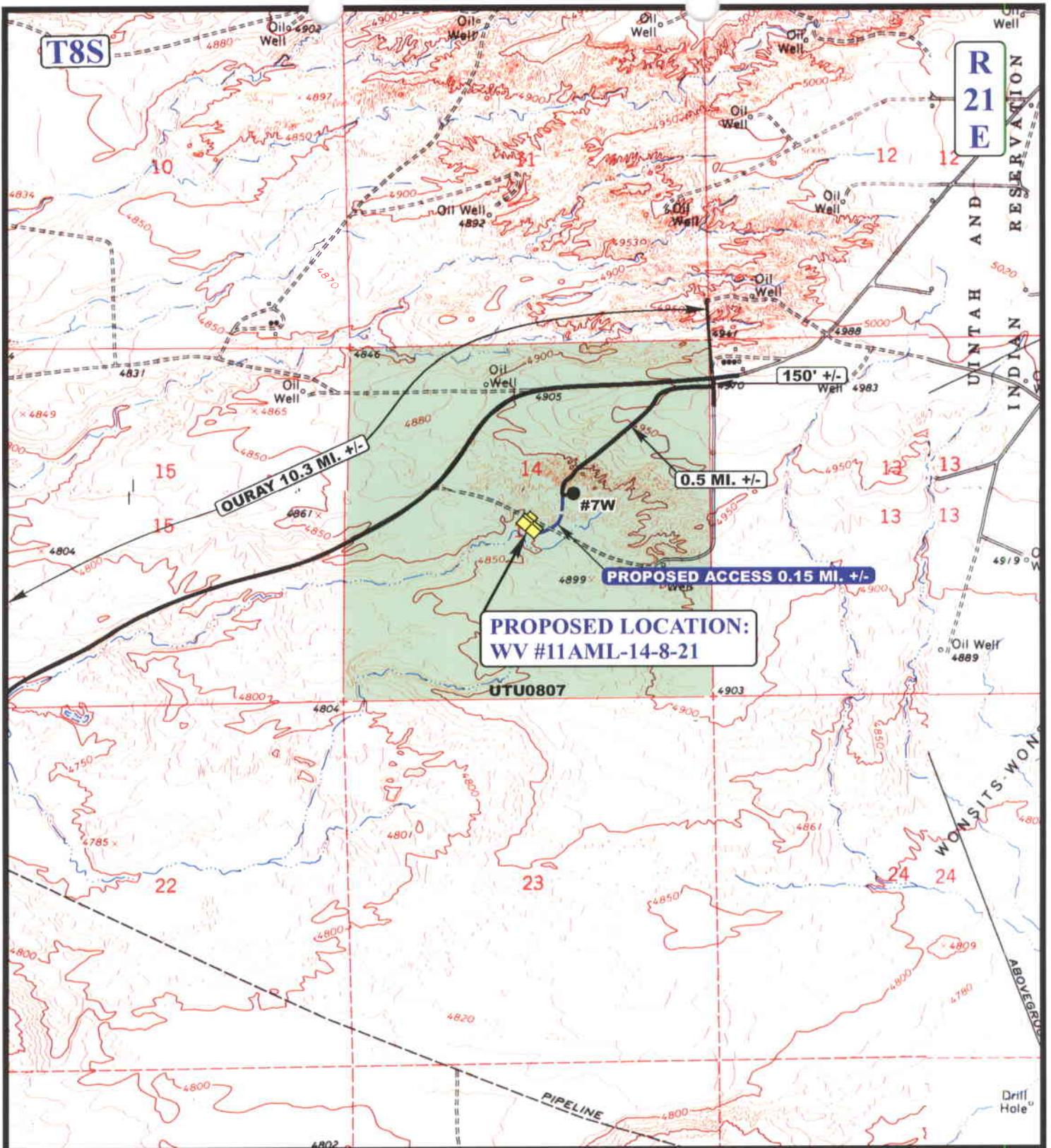
WV #11AML-14-8-21  
 SECTION 14, T8S, R21E, S.L.B.&M.  
 2601' FSL 2611' FEL



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

TOPOGRAPHIC MAP  
 03 06 06  
 MONTH DAY YEAR  
 SCALE: 1:100,000 DRAWN BY: C.P. REVISED: 00-00-00





**LEGEND:**

-  EXISTING ROAD
-  PROPOSED ACCESS ROAD



**QUESTAR EXPLR. & PROD.**

WV #11AML-14-8-21  
 SECTION 14, T8S, R21E, S.L.B.&M.  
 2601' FSL 2611' FEL



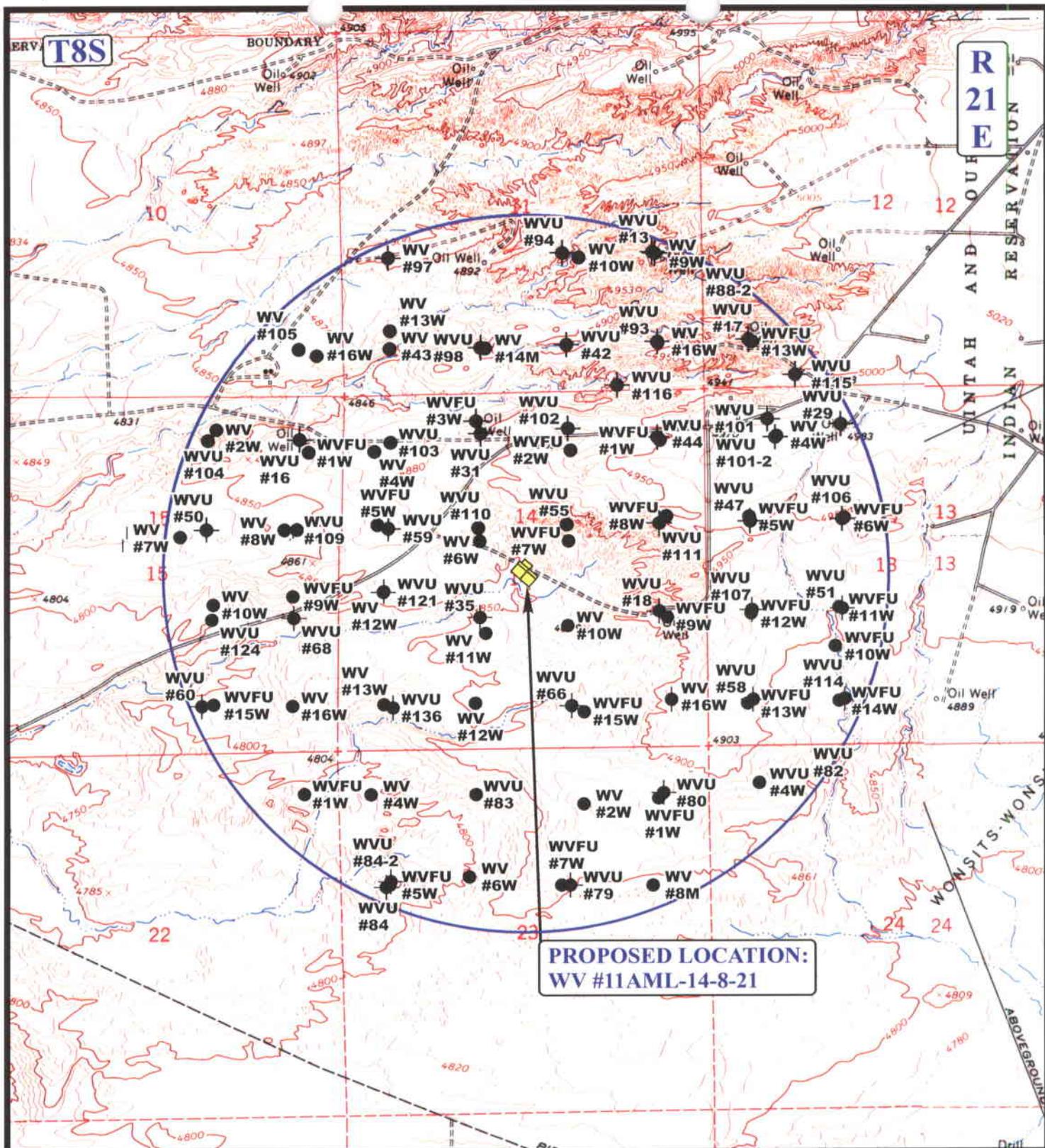
**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC  
 MAP**

<b>03</b>	<b>06</b>	<b>06</b>
MONTH	DAY	YEAR



SCALE: 1" = 2000'    DRAWN BY: C.P.    REVISED: 00-00-00



**PROPOSED LOCATION:  
WV #11AML-14-8-21**

**LEGEND:**

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

**QUESTAR EXPLR. & PROD.**

**WV #11AML-14-8-21  
SECTION 14, T8S, R21E, S.L.B.&M.  
2601' FSL 2611' FEL**



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

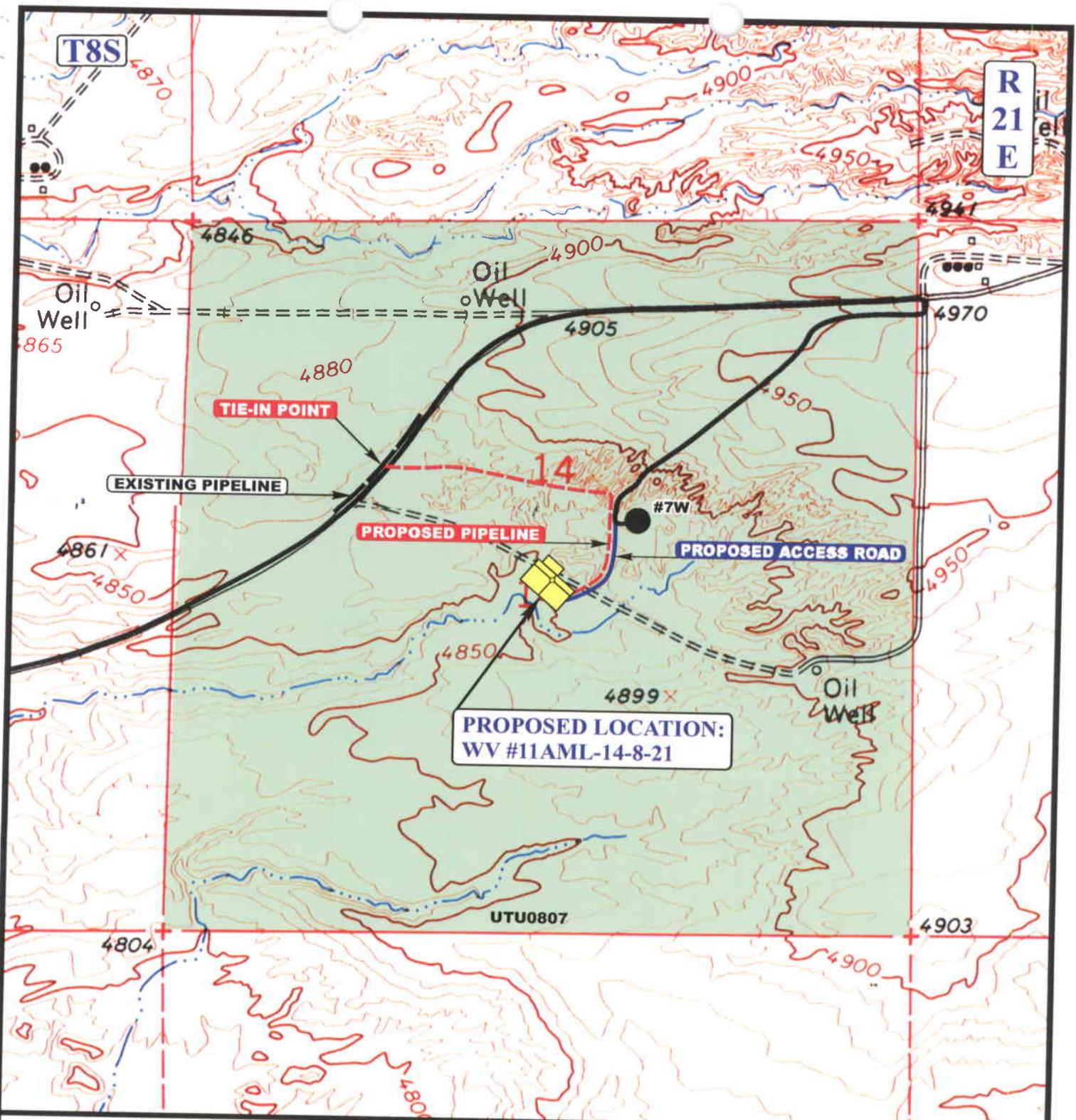


**TOPOGRAPHIC  
MAP**

**03 06 06**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.P. REVISED: 00-00-00





**APPROXIMATE TOTAL PIPELINE DISTANCE = 2,664' +/-**

**LEGEND:**

-  PROPOSED ACCESS ROAD
-  EXISTING PIPELINE
-  PROPOSED PIPELINE

**QUESTAR EXPLR. & PROD.**

**WV #11AML-14-8-21  
SECTION 14, T8S, R21E, S.L.B.&M.  
2601' FSL 2611' FEL**



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

**TOPOGRAPHIC MAP**

**03 06 06**  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: C.P. REVISED: 00-00-00



**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 04/28/2006

API NO. ASSIGNED: 43-047-38049

WELL NAME: WV 11AML-14-8-21

OPERATOR: QEP UINTA BASIN, INC. ( N2460 )

PHONE NUMBER: 435-781-4331

CONTACT: JAN NELSON

PROPOSED LOCATION:

NWSE 14 080S 210E

SURFACE: 2601 FSL 2611 FEL

BOTTOM: 2601 FSL 2611 FEL

COUNTY: UINTAH

LATITUDE: 40.12351 LONGITUDE: -109.5208

UTM SURF EASTINGS: 626043 NORTHINGS: 4442304

FIELD NAME: WONSITS VALLEY ( 710 )

INSPECT LOCATN BY: / /		
<b>Tech Review</b>	<b>Initials</b>	<b>Date</b>
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0807

SURFACE OWNER: 2 - Indian

PROPOSED FORMATION: MVRD

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. ESB000024 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 49-2153 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

- R649-2-3.
- Unit: WONSITS VALLEY *OK*
- R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: 187-06  
Eff Date: 8-2-2001  
Siting: Suspends Gen of Casting
- R649-3-11. Directional Drill

COMMENTS: See Separate file

STIPULATIONS: 1- Sealing approved





**State of Utah**

**Department of  
Natural Resources**

MICHAEL R. STYLER  
*Executive Director*

**Division of  
Oil, Gas & Mining**

JOHN R. BAZA  
*Division Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

May 4, 2006

QEP Uinta Basin, Inc.  
11002 E 17500 S  
Vernal, UT 84078

Re: Wonsits Valley 11AML-14-8-21 Well, 2601' FSL, 2611' FEL, NW SE,  
Sec. 14, T. 8 South, R. 21 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

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. The API identification number assigned to this well is 43-047-38049.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** QEP Uinta Basin, Inc.

**Well Name & Number** Wonsits Valley 11AML-14-8-21

**API Number:** 43-047-38049

**Lease:** UTU-0807

**Location:** NW SE                      Sec. 14                      T. 8 South                      R. 21 East

### **Conditions of Approval**

1. 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.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

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

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

<b>ROUTING</b>
1. DJJ
2. CDW

Change of Operator (Well Sold)

**X - Operator Name Change/Merger**

The operator of the well(s) listed below has changed, effective:

**1/1/2007**

<b>FROM:</b> (Old Operator): N2460-QEP Uinta Basin, Inc. 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 672-6900	<b>TO:</b> ( New Operator): N5085-Questar E&P Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 672-6900
---	--

CA No.		Unit:		WONSITS VALLEY UNIT				
WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED LISTS				*				

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 4/19/2007
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 4/16/2007
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 1/31/2005
- Is the new operator registered in the State of Utah: Business Number: 764611-0143
- (R649-9-2)Waste Management Plan has been received on: IN PLACE
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: n/a
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 4/23/2007 BIA
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 4/23/2007
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: \_\_\_\_\_
- Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: \_\_\_\_\_

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 4/30/2007 and 5/15/2007
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 4/30/2007 and 5/15/2007
- Bond information entered in RBDMS on: 4/30/2007 and 5/15/2007
- Fee/State wells attached to bond in RBDMS on: 4/30/2007 and 5/15/2007
- Injection Projects to new operator in RBDMS on: 4/30/2007 and 5/15/2007
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 799446
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965003033
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS: THIS IS A COMPANY NAME CHANGE.**

**SOME WELL NAMES HAVE BEEN CHANGED AS REQUESTED**

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
WONSITS VALLEY UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
WVU 16	WV 16	NENE	15	080S	210E	4304715447	5265	Federal	WI	A
WVU 31	WV 31	NENW	14	080S	210E	4304715460	5265	Federal	WI	A
WVU 35	WV 35	NESW	14	080S	210E	4304715463	5265	Federal	WI	A
WV 36	WV 36	NESW	10	080S	210E	4304715464	5265	Federal	WI	A
WVU 41	WV 41	NENW	15	080S	210E	4304715469	5265	Federal	WI	A
WV 43	WV 43	SWSW	11	080S	210E	4304715471	5265	Federal	OW	P
WV 48	WV 48	SWNE	10	080S	210E	4304715476	5265	Federal	OW	P
WVU 50	WV 50	SWNE	15	080S	210E	4304715477	5265	Federal	WI	A
WV 53	WV 53	SWSE	10	080S	210E	4304720003	5265	Federal	OW	P
WVU 55	WV 55	SWNE	14	080S	210E	4304720005	5265	Federal	OW	P
WVU 59	WV 59	SWNW	14	080S	210E	4304720018	5265	Federal	WI	A
WVU 60	WV 60	SWSE	15	080S	210E	4304720019	5265	Federal	WI	A
WV 62	WV 62	SWSW	10	080S	210E	4304720024	5265	Federal	OW	P
WVU 65	WV 65	SWNW	15	080S	210E	4304720041	5265	Federal	OW	P
WVU 67	WV 67	NESW	15	080S	210E	4304720043	5265	Federal	WI	A
WVU 68	WV 68	NESE	15	080S	210E	4304720047	5265	Federal	WI	A
WVU 83	WV 83 WG	NENW	23	080S	210E	4304720205	14864	Federal	GW	S
WV 97	WV 97	NWSW	11	080S	210E	4304730014	5265	Federal	WI	A
WVU 103	WV 103	NWNW	14	080S	210E	4304730021	5265	Federal	OW	P
WVU 104	WV 104	NWNE	15	080S	210E	4304730022	5265	Federal	OW	P
WV 105	WV 105	SESE	10	080S	210E	4304730023	5265	Federal	OW	P
WVU 109	WV 109	SENE	15	080S	210E	4304730045	5265	Federal	OW	P
WVU 110	WV 110	SENE	14	080S	210E	4304730046	5265	Federal	OW	P
WVU 112	WV 112	SENE	15	080S	210E	4304730048	5265	Federal	OW	P
WVU 124	WV 124	NWSE	15	080S	210E	4304730745	5265	Federal	OW	P
WVU 126	WV 126	NWNE	21	080S	210E	4304730796	5265	Federal	WI	A
WV 128	WV 128	SESW	10	080S	210E	4304730798	5265	Federal	OW	P
WVU 132	WV 132	NWSW	15	080S	210E	4304730822	5265	Federal	OW	P
WVU 136	WV 136	NENW	21	080S	210E	4304731047	5265	Federal	OW	S
WV 137	WV 137	SENE	11	080S	210E	4304731523	5265	Federal	OW	P
WV 28-2	WV 28-2	NESW	11	080S	210E	4304731524	99990	Federal	WI	A
WVU 133	WV 133	SESW	15	080S	210E	4304731706	5265	Federal	OW	P
WVU 140	WV 140	NWNW	15	080S	210E	4304731707	5265	Federal	WI	A
WV 40-2	WV 40-2	NESE	10	080S	210E	4304731798	5265	Federal	WI	A
WVU 144	WV 144	SENE	10	080S	210E	4304731807	5265	Federal	OW	P
WV 143	WV 143	NWSE	10	080S	210E	4304731808	5265	Federal	WI	A
WVU 145	WV 145	NWNW	18	080S	220E	4304731820	14864	Federal	GW	P
WVU 121	WV 121	NWSW	14	080S	210E	4304731873	5265	Federal	OW	TA
WVU 135-2	WV 135-2	NENE	21	080S	210E	4304732016	5265	Federal	OW	P
WVU 130	WV 130	NWNW	22	080S	210E	4304732307	5265	Federal	OW	P
WVU 71-2	WV 71-2	SWSW	15	080S	210E	4304732449	5265	Federal	WI	A

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
WONSITS VALLEY UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
WVFU 119	WV 119	NWNW	21	080S	210E	4304732461	5265	Federal	OW	P
WVFU 120	WV 120	NENW	22	080S	210E	4304732462	5265	Federal	WI	A
WVFU 54 WG	WV 54 WG	SWSE	07	080S	220E	4304732821	14864	Federal	GW	P
WVFU 69 WG	WV 69 WG	SWNE	18	080S	220E	4304732829	14864	Federal	GW	P
WVFU 38 WG	WV 38 WG	SWNW	08	080S	220E	4304732831	14864	Federal	GW	P
WVFU 49 WG	WV 49 WG	SWSW	08	080S	220E	4304732832	14864	Federal	GW	P
WVFU 138 WG	WV 138 WG	SWNW	18	080S	220E	4304733054	14864	Federal	GW	P
WVFU 14 WG	WV 14 WG	SWSE	12	080S	210E	4304733070	14864	Federal	GW	P
WVFU 11 WG	WV 11 WG	SWNE	12	080S	210E	4304733085	14864	Federal	GW	P
WVFU 81 WG	WV 81 WG	SWNW	24	080S	210E	4304733086	14864	Federal	GW	P
WVFU 146 WG	WV 146 WG	NWNW	19	080S	220E	4304733128	14864	Federal	GW	P
WVFU 1W-14-8-21	WV 1W-14-8-21	NENE	14	080S	210E	4304733220	14864	Federal	GW	P
WVFU 5W-13-8-21	WV 5W-13-8-21	SWNW	13	080S	210E	4304733221	14864	Federal	GW	P
WVFU 46 WG	WV 46 WG	NESE	07	080S	220E	4304733241	14864	Federal	GW	P
WVFU 9W-14-8-21	WV 9W-14-8-21	NESE	14	080S	210E	4304733269	14864	Federal	GW	P
WVFU 7W-13-8-21	WV 7W-13-8-21	SWNE	13	080S	210E	4304733270	14864	Federal	GW	P
WVFU 1W-18-8-22	WV 1W-18-8-22	NENE	18	080S	220E	4304733294	14864	Federal	GW	P
WVFU 11W-8-8-22	WV 11W-8-8-22	NESW	08	080S	220E	4304733295	14864	Federal	GW	P
WVFU 3W-8-8-22	WV 3W-8-8-22	NENW	08	080S	220E	4304733493	14864	Federal	GW	S
WVFU 5W-7-8-22	WV 5W-7-8-22	SWNW	07	080S	220E	4304733494	14864	Federal	GW	P
WVFU 11W-7-8-22	WV 11W-7-8-22	NESW	07	080S	220E	4304733495	14864	Federal	GW	P
WVFU 13W-7-8-22	WV 13W-7-8-22	SWSW	07	080S	220E	4304733496	14864	Federal	GW	P
WVFU 1W-7-8-22	WV 1W-7-8-22	NENE	07	080S	220E	4304733501	14864	Federal	GW	P
WVFU 3W-7-8-22	WV 3W-7-8-22	NENW	07	080S	220E	4304733502	14864	Federal	GW	P
WV 7WRG-7-8-22	WV 7WRG-7-8-22	SWNE	07	080S	220E	4304733503	5265	Federal	OW	P
WVFU 16W-9-8-21	WV 16W-9-8-21	SESE	09	080S	210E	4304733529	14864	Federal	GW	P
WVFU 1W-12-8-21	WV 1W-12-8-21	NENE	12	080S	210E	4304733531	14864	Federal	GW	P
WVFU 1W-13-8-21	WV 1W-13-8-21	NENE	13	080S	210E	4304733532	14864	Federal	GW	P
WVFU 3W-18-8-22	WV 3W-18-8-22	NENW	18	080S	220E	4304733533	14864	Federal	GW	P
WVFU 9W-12-8-21	WV 9W-12-8-21	NESE	12	080S	210E	4304733534	14864	Federal	GW	P
WVFU 11W-12-8-21	WV 11W-12-8-21	NESW	12	080S	210E	4304733535	14864	Federal	GW	P
WVFU 11W-13-8-21	WV 11W-13-8-21	NESW	13	080S	210E	4304733536	14864	Federal	GW	P
WVFU 13W-12-8-21	WV 13W-12-8-21	SWSW	12	080S	210E	4304733537	14864	Federal	GW	S
WVFU 13W-18-8-22	WV 13W-18-8-22	SWSW	18	080S	220E	4304733538	14864	Federal	GW	P
WVFU 16G-9-8-21	WV 16G-9-8-21	SESE	09	080S	210E	4304733565	5265	Federal	OW	P
WVFU 1W-21-8-21	WV 1W-21-8-21	NENE	21	080S	210E	4304733602	14864	Federal	GW	P
WVFU 3W-13-8-21	WV 3W-13-8-21	NENW	13	080S	210E	4304733603	14864	Federal	GW	S
WVFU 3W-22-8-21	WV 3W-22-8-21	NENW	22	080S	210E	4304733604	14864	Federal	GW	P
WVFU 3W-24-8-21	WV 3W-24-8-21	NENW	24	080S	210E	4304733605	14864	Federal	GW	P
WVFU 13W-13-8-21	WV 13W-13-8-21	SWSW	13	080S	210E	4304733606	14864	Federal	GW	S
WVFU 13W-14-8-21	WV 13W-14-8-21	SWSW	14	080S	210E	4304733607	14864	Federal	GW	P

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
WONSITS VALLEY UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
WVFU 15W-13-8-21	WV 15W-13-8-21	SWSE	13	080S	210E	4304733608	14864	Federal	GW	S
WVFU 1W-24-8-21	WV 1W-24-8-21	NENE	24	080S	210E	4304733613	14864	Federal	GW	P
WVFU 11W-18-8-22	WV 11W-18-8-22	NESW	18	080S	220E	4304733626	14864	Federal	GW	P
WV 2W-10-8-21	WV 2W-10-8-21	NWNE	10	080S	210E	4304733655	14864	Federal	GW	P
WV 4W-11-8-21	WV 4W-11-8-21	NWNW	11	080S	210E	4304733657	14864	Federal	GW	P
WV 12W-10-8-21	WV 12W-10-8-21	NWSW	10	080S	210E	4304733659	14864	Federal	GW	S
WV 12G-10-8-21	WV 12G-10-8-21	NWSW	10	080S	210E	4304733660	5265	Federal	OW	P
WVFU 15W-9-8-21	WV 15W-9-8-21	SWSE	09	080S	210E	4304733661	14864	Federal	GW	P
WVFU 15G-9-8-21	WV 15G-9-8-21	SWSE	09	080S	210E	4304733662	5265	Federal	OW	P
WVFU 2W-13-8-21	WV 2W-13-8-21	NWNE	13	080S	210E	4304733791	14864	Federal	GW	P
WVFU 6W-13-8-21	WV 6W-13-8-21	SENE	13	080S	210E	4304733792	14864	Federal	GW	P
WVFU 8W-13-8-21	WV 8W-13-8-21	SENE	13	080S	210E	4304733793	14864	Federal	GW	P
WV 10W-1-8-21	WV 10W-1-8-21	NWSE	01	080S	210E	4304733794	14864	Federal	GW	TA
WVFU 10W-13-8-21	WV 10W-13-8-21	NWSE	13	080S	210E	4304733795	14864	Federal	GW	P
WVFU 12W-7-8-22	WV 12W-7-8-22	NWSW	07	080S	220E	4304733808	14864	Federal	GW	P
WVFU 6W-8-8-22	WV 6W-8-8-22	SENE	08	080S	220E	4304733811	14864	Federal	GW	P
WVFU 7W-8-8-22	WV 7W-8-8-22	SWNE	08	080S	220E	4304733812	14864	Federal	GW	S
WVFU 10W-7-8-22	WV 10W-7-8-22	NWSE	07	080S	220E	4304733813	14864	Federal	GW	P
WVFU 12W-8-8-22	WV 12W-8-8-22	NWSW	08	080S	220E	4304733815	14864	Federal	GW	P
WVFU 14W-7-8-22	WV 14W-7-8-22	SESE	07	080S	220E	4304733816	14864	Federal	GW	P
WVFU 16W-7-8-22	WV 16W-7-8-22	SESE	07	080S	220E	4304733817	14864	Federal	GW	P
WVFU 6W-7-8-22	WV 6W-7-8-22	SENE	07	080S	220E	4304733828	14864	Federal	GW	P
WVFU 6W-18-8-22	WV 6W-18-8-22	SENE	18	080S	220E	4304733842	14864	Federal	GW	P
WVFU 6WC-18-8-22	WV 6WC-18-8-22	SENE	18	080S	220E	4304733843	14864	Federal	GW	P
WVFU 6WD-18-8-22	WV 6WD-18-8-22	SENE	18	080S	220E	4304733844	14864	Federal	GW	P
WVFU 5W-23-8-21	WV 5W-23-8-21	SWNW	23	080S	210E	4304733860	14864	Federal	GW	P
WVFU 7W-23-8-21	WV 7W-23-8-21	SWNE	23	080S	210E	4304733861	14864	Federal	GW	P
WVFU 8W-12-8-21	WV 8W-12-8-21	SENE	12	080S	210E	4304733862	14864	Federal	GW	P
WVFU 10W-12-8-21	WV 10W-12-8-21	NWSE	12	080S	210E	4304733863	14864	Federal	GW	P
WVFU 14W-12-8-21	WV 14W-12-8-21	SESE	12	080S	210E	4304733864	14864	Federal	GW	P
WVFU 16W-12-8-21	WV 16W-12-8-21	SESE	12	080S	210E	4304733865	14864	Federal	GW	P
WVFU 1W-15-8-21	WV 1W-15-8-21	NENE	15	080S	210E	4304733902	14864	Federal	GW	S
WVFU 1W-22-8-21	WV 1W-22-8-21	NENE	22	080S	210E	4304733903	14864	Federal	GW	P
WVFU 1W-23-8-21	WV 1W-23-8-21	NENE	23	080S	210E	4304733904	14864	Federal	GW	P
WV 6W-11-8-21	WV 6W-11-8-21	SENE	11	080S	210E	4304733906	14864	Federal	GW	P
WVFU 7W-24-8-21	WV 7W-24-8-21	SWNE	24	080S	210E	4304733908	14864	Federal	GW	P
WV 10W-11-8-21	WV 10W-11-8-21	NWSE	11	080S	210E	4304733910	14864	Federal	GW	P
WVFU 11W-15-8-21	WV 11W-15-8-21	NESW	15	080S	210E	4304733911	14864	Federal	GW	P
WV 13W-11-8-21	WV 13W-11-8-21	SWSW	11	080S	210E	4304733913	14864	Federal	GW	S
WVFU 13W-15-8-21	WV 13W-15-8-21	SWSW	15	080S	210E	4304733914	14864	Federal	GW	P
WV 15W-10-8-21	WV 15W-10-8-21	SWSE	10	080S	210E	4304733916	14864	Federal	GW	P

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
WONSITS VALLEY UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
WVFU 15W-15-8-21	WV 15W-15-8-21	SWSE	15	080S	210E	4304733917	14864	Federal	GW	P
WVFU 5W-14-8-21	WV 5W-14-8-21	SWNW	14	080S	210E	4304733953	14864	Federal	GW	P
WVFU 7W-14-8-21	WV 7W-14-8-21	SWNE	14	080S	210E	4304733955	14864	Federal	GW	P
WV 8W-11-8-21	WV 8W-11-8-21	SENE	11	080S	210E	4304733957	14864	Federal	GW	S
WVFU 8W-14-8-21	WV 8W-14-8-21	SENE	14	080S	210E	4304733958	14864	Federal	GW	P
WVFU 9W-15-8-21	WV 9W-15-8-21	NESE	15	080S	210E	4304733959	14864	Federal	GW	P
WVFU 12W-13-8-21	WV 12W-13-8-21	NWSW	13	080S	210E	4304733961	14864	Federal	GW	P
WVFU 14W-13-8-21	WV 14W-13-8-21	SESW	13	080S	210E	4304733962	14864	Federal	GW	P
WVFU 15W-14-8-21	WV 15W-14-8-21	SWSE	14	080S	210E	4304733963	14864	Federal	GW	P
WVFU 2W-18-8-22	WV 2W-18-8-22	NWNE	18	080S	220E	4304733986	14864	Federal	GW	P
WV 8W-18-8-22	WV 8W-18-8-22	SENE	18	080S	220E	4304733989	14864	Federal	GW	P
WVFU 10W-18-8-22	WV 10W-18-8-22	NWSE	18	080S	220E	4304733991	14864	Federal	GW	P
WVFU 12W-18-8-22	WV 12W-18-8-22	NWSW	18	080S	220E	4304733993	14864	Federal	GW	P
WV 14W-18-8-22	WV 14W-18-8-22	SESW	18	080S	220E	4304733995	14864	Federal	GW	P
WVFU 8W-1-8-21	WV 8W-1-8-21	SENE	01	080S	210E	4304734009	14864	Federal	GW	DRL
WV 4W-17-8-22	WV 4W-17-8-22	NWNW	17	080S	220E	4304734038	14864	Federal	GW	P
WV 12G-1-8-21	WV 12G-1-8-21	NWSW	01	080S	210E	4304734108	5265	Federal	OW	TA
WV 2W-14-8-21	WV 2W-14-8-21	NWNE	14	080S	210E	4304734140	14864	Federal	GW	P
GH 2W-21-8-21	GH 2W-21-8-21	NWNE	21	080S	210E	4304734141	14864	Federal	GW	P
WV 2W-23-8-21	WV 2W-23-8-21	NWNE	23	080S	210E	4304734142	14864	Federal	GW	P
GH 3W-21-8-21	WV 3W-21-8-21	NENW	21	080S	210E	4304734143	14864	Federal	GW	P
WV 4W-13-8-21	WV 4W-13-8-21	NWNW	13	080S	210E	4304734144	14864	Federal	GW	P
GH 4W-21-8-21	WV 4W-21-8-21	NWNW	21	080S	210E	4304734145	14864	Federal	GW	P
WV 4W-22-8-21	WV 4W-22-8-21	NWNW	22	080S	210E	4304734146	14864	Federal	GW	P
WV 16W-11-8-21	WV 16W-11-8-21	SESE	11	080S	210E	4304734155	14864	Federal	GW	TA
WV 3W-19-8-22	WV 3W-19-8-22	NENW	19	080S	220E	4304734187	14864	Federal	GW	P
WV 4W-23-8-21	WV 4W-23-8-21	NWNW	23	080S	210E	4304734188	14864	Federal	GW	P
WV 6W-23-8-21	WV 6W-23-8-21	SENE	23	080S	210E	4304734189	14864	Federal	GW	P
WV 2W-15-8-21	WV 2W-15-8-21	NWNE	15	080S	210E	4304734242	14864	Federal	GW	P
WV 2W-22-8-21	WV 2W-22-8-21	NWNE	22	080S	210E	4304734243	14864	Federal	GW	P
WV 4W-14-8-21	WV 4W-14-8-21	NWNW	14	080S	210E	4304734244	14864	Federal	GW	P
WV 6W-12-8-21	WV 6W-12-8-21	SENE	12	080S	210E	4304734245	5265	Federal	GW	S
WV 7W-15-8-21	WV 7W-15-8-21	SWNE	15	080S	210E	4304734246	14864	Federal	GW	P
WV 8W-15-8-21	WV 8W-15-8-21	SENE	15	080S	210E	4304734247	14864	Federal	GW	P
WV 12W-12-8-21	WV 12W-12-8-21	NWSW	12	080S	210E	4304734248	14864	Federal	GW	S
WV 14W-15-8-21	WV 14W-15-8-21	SESW	15	080S	210E	4304734249	14864	Federal	GW	P
WV 16W-10-8-21	WV 16W-10-8-21	SESE	10	080S	210E	4304734250	14864	Federal	GW	P
WV 16W-15-8-21	WV 16W-15-8-21	SESE	15	080S	210E	4304734251	14864	Federal	GW	P
WV 2W-12-8-21	WV 2W-12-8-21	NWNE	12	080S	210E	4304734265	14864	Federal	GW	OPS
WV 3W-12-8-21	WV 3W-12-8-21	NENW	12	080S	210E	4304734267	14864	Federal	GW	OPS
WV 4W-12-8-21	WV 4D-12-8-21	NWNW	12	080S	210E	4304734268	12436	Federal	GW	DRL

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
WONSITS VALLEY UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
WV 5W-12-8-21	WV 5W-12-8-21	SWNW	12	080S	210E	4304734270	14864	Federal	GW	OPS
WV 6W-14-8-21	WV 6W-14-8-21	SENW	14	080S	210E	4304734271	14864	Federal	GW	P
WV 9W-11-8-21	WV 9W-11-8-21	NESE	11	080S	210E	4304734274	14864	Federal	GW	DRL
WV 10W-14-8-21	WV 10W-14-8-21	NWSE	14	080S	210E	4304734275	14864	Federal	GW	S
WV 11W-14-8-21	WV 11W-14-8-21	NESW	14	080S	210E	4304734277	14864	Federal	GW	P
WV 12W-14-8-21	WV 12W-14-8-21	NWSW	14	080S	210E	4304734279	14864	Federal	GW	S
WV 14M-11-8-21	WV 14M-11-8-21	SESW	11	080S	210E	4304734280	14864	Federal	GW	P
WV 14W-14-8-21	WV 14W-14-8-21	SESW	14	080S	210E	4304734281	14864	Federal	GW	P
WV 16W-14-8-21	WV 16G-14-8-21	SESE	14	080S	210E	4304734283	5265	Federal	OW	S
WV 3MU-15-8-21	WV 3MU-15-8-21	NENW	15	080S	210E	4304734289	14864	Federal	GW	P
WV 4MU-15-8-21	WV 4MU-15-8-21	NWNW	15	080S	210E	4304734291	14864	Federal	GW	P
WV 5MU-15-8-21	WV 5MU-15-8-21	SWNW	15	080S	210E	4304734293	14864	Federal	GW	P
WV 6W-15-8-21	WV 6W-15-8-21	SENW	15	080S	210E	4304734294	14864	Federal	GW	P
WV 10W-15-8-21	WV 10W-15-8-21	NWSE	15	080S	210E	4304734295	14864	Federal	GW	P
WVU 4W-24-8-21	WV 4W-24-8-21	NWNW	24	080S	210E	4304734330	14864	Federal	GW	P
WV 8M-23-8-21	WV 8M-23-8-21	SENE	23	080S	210E	4304734339	14864	Federal	GW	P
WVU 8W-24-8-21	WV 8W-24-8-21	SENE	24	080S	210E	4304734340	14864	Federal	GW	P
WV 2W-8-8-22	WV 2W-8-8-22	NWNE	08	080S	220E	4304734468	14864	Federal	GW	P
WV 8W-7-8-22	WV 8W-7-8-22	SENE	07	080S	220E	4304734469	14864	Federal	GW	S
WV 8W-22-8-21	WV 8W-22-8-21	SENE	22	080S	210E	4304734564	14864	Federal	GW	P
WV 3G-8-8-22	WV 3G-8-8-22	NENW	08	080S	220E	4304734596	5265	Federal	OW	TA
WV 14MU-10-8-21	WV 14MU-10-8-21	SESW	10	080S	210E	4304735879	14864	Federal	GW	P
WV 13MU-10-8-21	WV 13MU-10-8-21	SWSW	10	080S	210E	4304736305	14864	Federal	GW	P
WV 3DML-13-8-21	WV 3D-13-8-21	SENW	13	080S	210E	4304737923	14864	Federal	GW	DRL
WV 14DML-12-8-21	WV 14DML-12-8-21	SESW	12	080S	210E	4304737924	14864	Federal	GW	DRL
WV 15AML-12-8-21	WV 15AML-12-8-21	NWSE	12	080S	210E	4304737925		Federal	GW	APD
WV 13DML-10-8-21	WV 13DML-10-8-21	SWSW	10	080S	210E	4304737926	14864	Federal	GW	P
WV 4DML-15-8-21	WV 4DML-15-8-21	NWNW	15	080S	210E	4304737927	14864	Federal	GW	DRL
WV 13AD-8-8-22	WV 13AD-8-8-22	SWSW	08	080S	220E	4304737945		Federal	GW	APD
WV 11AML-14-8-21	WV 11AD-14-8-21	NWSE	14	080S	210E	4304738049	15899	Federal	GW	APD
WV 11DML-14-8-21	WV 11DML-14-8-21	SESW	14	080S	210E	4304738050		Federal	GW	APD
WV 4AML-19-8-22	WV 4AML-19-8-22	NWNW	19	080S	220E	4304738051		Federal	GW	APD
WV 13CML-8-8-22	WV 13CML-8-8-22	SWSW	08	080S	220E	4304738431		Federal	GW	APD
WV 13BML-18-8-22	WV 13BML-18-8-22	SWSW	18	080S	220E	4304738432		Federal	GW	APD
WV 8BML-18-8-22	WV 8BML-18-8-22	E/NE	18	080S	220E	4304738433		Federal	GW	APD
WV 6ML-24-8-21	WV 6-24-8-21	SENW	24	080S	210E	4304738663		Federal	GW	APD
WV 2ML-24-8-21	WV 2ML-24-8-21	NWNE	24	080S	210E	4304738664		Federal	GW	APD
WV 1DML-13-8-21	WV 1DML-13-8-21	NENE	13	080S	210E	4304738733		Federal	GW	APD
WV 4DML-13-8-21	WV 4DML-13-8-21	NWNW	13	080S	210E	4304738734		Federal	GW	APD
WV 3AML-14-8-21	WV 3AML-14-8-21	NENW	14	080S	210E	4304738736		Federal	GW	APD
WV 16CML-14-8-21	WV 16C-14-8-21	SESE	14	080S	210E	4304738737		Federal	GW	APD

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
WONSITS VALLEY UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
WVU 21	WV 21	NENE	16	080S	210E	4304715452	99990	State	WI	A
WVU 32	WV 32	NENW	16	080S	210E	4304716513	5265	State	OW	P
WVU 72	WV 72	SWSW	16	080S	210E	4304720058	99990	State	WI	A
WVU 73	WV 73	NESE	16	080S	210E	4304720066	5265	State	WI	A
WVU 74	WV 74	SWSE	16	080S	210E	4304720078	5265	State	OW	P
WVU 75	WV 75	SWNE	16	080S	210E	4304720085	5265	State	OW	P
WVU 78	WV 78	NESW	16	080S	210E	4304720115	99990	State	WI	A
WVU 134	WV 134	SESE	16	080S	210E	4304731118	5265	State	OW	P
WVU 141	WV 141	NWSE	16	080S	210E	4304731609	5265	State	OW	P
WVU 127	WV 127	SENE	16	080S	210E	4304731611	5265	State	OW	P
WVU 142	WV 142	SESW	16	080S	210E	4304731612	5265	State	OW	P
WVUFU 9W-13-8-21	WV 9W-13-8-21	NESE	13	080S	210E	4304733223	14864	State	GW	S
WVUFU 2W-16-8-21	WV 2W-16-8-21	NWNE	16	080S	210E	4304733246	14864	State	GW	P
WVUFU 2G-16-8-21	WV 2G-16-8-21	NWNE	16	080S	210E	4304733247	5265	State	OW	P
WVUFU 6W-16-8-21	WV 6W-16-8-21	SENE	16	080S	210E	4304733527	14864	State	GW	P
WVUFU 6G-16-8-21	WV 6G-16-8-21	SENE	16	080S	210E	4304733564	5265	State	OW	P
WVUFU 16W-2-8-21	WV 16W-2-8-21	SESE	02	080S	210E	4304733645	5265	State	OW	S
WVUFU 9W-2-8-21	WV 9W-2-8-21	NESE	02	080S	210E	4304733648	14864	State	GW	P
WVUFU 12W-16-8-21	WV 12W-16-8-21	NWSW	16	080S	210E	4304733649	14864	State	GW	P
WVUFU 12G-16-8-21	WV 12G-16-8-21	NWSW	16	080S	210E	4304733650	5265	State	OW	P
WVUFU 16W-13-8-21	WV 16W-13-8-21	SESE	13	080S	210E	4304733796	14864	State	GW	P
WV 10G-2-8-21	WV 10G-2-8-21	NWSE	02	080S	210E	4304734035	5265	State	OW	P
WV 14G-2-8-21	WV 14G-2-8-21	SESW	02	080S	210E	4304734036	5265	State	OW	P
WV 13G-2-8-21	WV 13G-2-8-21	SWSW	02	080S	210E	4304734068	5265	State	OW	P
WV 5G-16-8-21	WV 5G-16-8-21	SWNW	16	080S	210E	4304734107	5265	State	OW	P
WV 11W-16-8-21	WV 11W-16-8-21	NESW	16	080S	210E	4304734190	14864	State	GW	P
WV 13W-16-8-21	WV 13W-16-8-21	SWSW	16	080S	210E	4304734191	14864	State	GW	P
WV 14W-16-8-21	WV 14W-16-8-21	SESW	16	080S	210E	4304734192	14864	State	GW	P
WV 15W-16-8-21	WV 15W-16-8-21	SWSE	16	080S	210E	4304734224	14864	State	GW	P
WV 16W-16-8-21	WV 16W-16-8-21	SESE	16	080S	210E	4304734225	14864	State	GW	P
WV 1MU-16-8-21	WV 1MU-16-8-21	NENE	16	080S	210E	4304734288	14864	State	GW	P
WV 3W-16-8-21	WV 3W-16-8-21	NENW	16	080S	210E	4304734290		State	GW	LA
WV 4W-16-8-21	WV 4W-16-8-21	NWNW	16	080S	210E	4304734292	12436	State	D	PA
WVU 5W-16-8-21	WV 5W-16-8-21	SWNW	16	080S	210E	4304734321	14864	State	GW	P
WV 7W-16-8-21	WV 7W-16-8-21	SWNE	16	080S	210E	4304734322	14864	State	GW	P
WV 8ML-16-8-21	WV 8ML-16-8-21	SENE	16	080S	210E	4304734323	14864	State	GW	P
WV 9W-16-8-21	WV 9W-16-8-21	NESE	16	080S	210E	4304734325	14864	State	GW	P
WV 10W-16-8-21	WV 10W-16-8-21	NWSE	16	080S	210E	4304734326	14864	State	GW	P
WV 12BML-16-8-21	WV 12BML-16-8-21	SWNW	16	080S	210E	4304737824	14864	State	GW	P
WV 12DML-16-8-21	WV 12D-16-8-21	NWSW	16	080S	210E	4304737870		State	GW	APD
WV 15CML-16-8-21	WV 15CML-16-8-21	SESW	16	080S	210E	4304737871	14864	State	GW	P

QEP Uinta Basin (N2460) to QUESTAR E and P (N5085)  
WONSITS VALLEY UNIT

4/30/2007 and 5/15/2007

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
WV 15DML-16-8-21	WV 15DML-16-8-21	SWSE	16	080S	210E	4304737872	State	State	GW	APD
WV 16DML-13-8-21	WV 16DML-13-8-21	SESE	13	080S	210E	4304738735	State	State	GW	APD

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: see attached
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: see attached
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: see attached
2. NAME OF OPERATOR: QUESTAR EXPLORATION AND PRODUCTION COMPANY		8. WELL NAME and NUMBER: see attached
3. ADDRESS OF OPERATOR: 1050 17th Street Suite 500 CITY Denver STATE CO ZIP 80265		9. API NUMBER: attached
PHONE NUMBER: (303) 308-3068		10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE: attached COUNTY: Uintah

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: UTAH

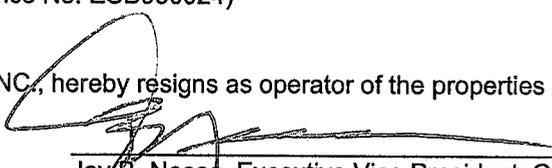
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: <u>1/1/2007</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion:	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

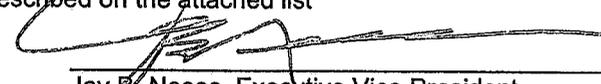
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

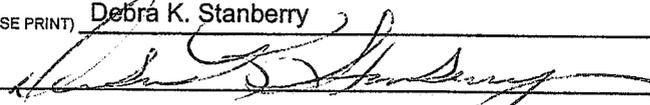
Effective January 1, 2007 operator of record, QEP Uinta Basin, Inc., will hereafter be known as QUESTAR EXPLORATION AND PRODUCTION COMPANY. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:  
Federal Bond Number: 965002976 (BLM Reference No. ESB000024)  
Utah State Bond Number: 965003033  
Fee Land Bond Number: 965003033

Current operator of record, QEP UINTA BASIN, INC., hereby resigns as operator of the properties as described on the attached list.

  
 Jay B. Neese, Executive Vice President, QEP Uinta Basin, Inc.

Successor operator of record, QUESTAR EXPLORATION AND PRODUCTION COMPANY, hereby assumes all rights, duties and obligations as operator of the properties as described on the attached list

  
 Jay B. Neese, Executive Vice President  
 Questar Exploration and Production Company

NAME (PLEASE PRINT) <u>Debra K. Stanberry</u>	TITLE <u>Supervisor, Regulatory Affairs</u>
SIGNATURE 	DATE <u>3/16/2007</u>

(This space for State use only)

RECEIVED  
APR 19 2007

**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.

<b>1. TYPE OF WELL</b> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> see attached
<b>2. NAME OF OPERATOR:</b> QUESTAR EXPLORATION AND PRODUCTION COMPANY		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> see attached
<b>3. ADDRESS OF OPERATOR:</b> 1050 17th Street Suite 500 Denver STATE CO ZIP 80265		<b>7. UNIT or CA AGREEMENT NAME:</b> see attached
<b>4. LOCATION OF WELL</b> FOOTAGES AT SURFACE: attached		<b>8. WELL NAME and NUMBER:</b> see attached
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		<b>9. API NUMBER:</b> attached
COUNTY: Uintah		<b>10. FIELD AND POOL, OR WILDCAT:</b>
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"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate)  Approximate date work will start: <u>1/1/2007</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Well Name Changes</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

PER THE ATTACHED LIST OF WELLS, QUESTAR EXPLORATION AND PRODUCTION COMPANY REQUESTS THAT THE INDIVIDUAL WELL NAMES BE UPDATED IN YOUR RECORDS.

NAME (PLEASE PRINT) <u>Debra K. Stanberry</u>	TITLE <u>Supervisor, Regulatory Affairs</u>
SIGNATURE	DATE <u>4/17/2007</u>

(This space for State use only)

RECEIVED

APR 19 2007

DIV. OF OIL, GAS & MINING



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, UT 84145-0155



IN REPLY REFER TO  
3180  
UT-922

April 23, 2007

Questar Exploration and Production Company  
1050 17th Street, Suite 500  
Denver, Colorado 80265

Re: Wonsits Valley Unit  
Uintah County, Utah

Gentlemen:

On April 12, 2007, we received an indenture dated April 6, 2007, whereby QEP Uinta Basin, Inc. resigned as Unit Operator and Questar Exploration and Production Company was designated as Successor Unit Operator for the Wonsits Valley Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 23, 2007. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Wonsits Valley Unit Agreement.

Your nationwide oil and gas bond No. ESB000024 will be used to cover all federal operations within the Wonsits Valley Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Greg J. Noble

Greg J. Noble  
Acting Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Vernal (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
File - Wonsits Valley Unit (w/enclosure)  
Agr. Sec. Chron  
Reading File  
Central Files

UT922:TAThompson:tt:4/23/07

RECEIVED

APR 30 2007

DIV. OF OIL, GAS & MINING

CONFIDENTIAL

Form 3160-3  
(July 1992)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*

FORM APPROVED  
OMB NO. 1040-0136  
Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.  
UTU-0807

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
UTE INDIAN TRIBE

7. UNIT AGREEMENT NAME  
WONSITS VALLEY

8. FARM OR LEASE NAME, WELL NO.  
WV 11AML-14-8-21

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

TYPE OF WORK

DRILL

DEEPEN

TYPE OF WELL

SINGLE  
ZONE

MULTIPLE  
ZONE

OIL WELL

GAS WELL

OTHER

2. NAME OF OPERATOR

QEP UINTA BASIN, INC.

Contact: Jan Nelson

E-Mail: jan.nelson@questar.com

3. ADDRESS

11002 E. 17500 S. Vernal, Ut 84078

Telephone number

Phone 435-781-4331 Fax 435-781-4323

9. API NUMBER:

43-047-38049

10. FIELD AND POOL, OR WILDCAT

WONSITS VALLEY

4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements\*)

At Surface 2601' FSL 2611' FEL NWSE SECTION 14, T8S, R21E  
At proposed production zone

11. SEC., T, R, M, OR BLK & SURVEY OR AREA

SEC. 14, T8S, R21E Mer SLB

14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE\*

11 +/- FROM OURAY, UTAH

12. COUNTY OR PARISH

Uintah

13. STATE

UT

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(also to nearest drig. unit line if any)

2601' +/-

16. NO. OF ACRES IN LEASE

1280.00

17. NO. OF ACRES ASSIGNED TO THIS WELL

20

18. DISTANCE FROM PROPOSED location to nearest well, drilling,  
completed, applied for, on this lease, ft

19. PROPOSED DEPTH

11,245'

20. BLM/BIA Bond No. on file  
ESB000024

21. ELEVATIONS (Show whether DF, RT, GR, ect.)

4851.6' GR

22. DATE WORK WILL START

ASAP

23. Estimated duration

20 days

24. Attachments

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

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

SIGNED

Name (printed/typed) Jan Nelson

DATE 4-25-06

TITLE Regulatory Affairs

(This space for Federal or State office use)

RECEIVED

FEB 13 2007

PERMIT NO.

APPROVAL DATE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

Assistant Field Manager  
Lands & Mineral Resources

DIV. OF OIL, GAS & MINING

DATE 2-8-2007

\*See Instructions On Reverse Side

Title 18 U.S.C Section 1001, makes 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

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

07BM4550A



**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 Uinta Basin, Inc.  
**Well No:** WV 11AML-14-8-21  
**API No:** 43-047-38049

**Location:** NWSE, Sec 14 T8S, R21E  
**Lease No:** UTU-0807  
**Agreement:** Wonsits Valley Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	435-781-4490	435-828-4470
Petroleum Engineer:	Michael Lee	435-781-4432	435-828-7875
Petroleum Engineer:	James Ashley	435-781-4470	435-828-7874
Petroleum Engineer:	Ryan Angus	435-781-4430	
Supervisory Petroleum Technician:	Jamie Sparger	435-781-4502	435-828-3913
NRS/Enviro Scientist:	Paul Buhler	435-781-4475	435-828-4029
NRS/Enviro Scientist:	Karl Wright	435-781-4484	
NRS/Enviro Scientist:	Holly Villa	435-781-4404	
NRS/Enviro Scientist:	Melissa Hawk	435-781-4476	435-828-7381
NRS/Enviro Scientist:	Chuck MacDonald	435-781-4441	
NRS/Enviro Scientist:	Jannice Cutler	435-781-3400	
NRS/Enviro Scientist:	Michael Cutler	435-781-3401	
NRS/Enviro Scientist:	Anna Figueroa	435-781-3407	
NRS/Enviro Scientist:	Verlyn Pindell	435-781-3402	
NRS/Enviro Scientist:	Darren Williams	435-781-4447	
NRS/Enviro Scientist:	Nathan Packer	435-781-3405	
<b>After Hours Contact Number: 435-781-4513</b>		<b>Fax: 435-781-4410</b>	

**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 one-year period. An additional year extension may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify NRS/Enviro Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify NRS/Enviro 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 Supervisory Petroleum Technician)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings
BOP & Related Equipment Tests (Notify Supervisory Petroleum Technician)	-	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)**

General Conditions of Approval

- A 30 foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROWs.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APDs and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel shall refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department shall be notified shall cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.

- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

**ADDITIONAL CONDITIONS OF APPROVAL:**

- Fossils were found in the area during paleontological reconnaissance survey. Therefore, all construction activities will need to be monitored by a permitted Paleontologist, and prior to any ground disturbance, all vertebrate fossils shall be removed and placed outside of the construction area.
- For any other additional stipulations, see concurrence letter.

**General Surface COA**

**Operator shall notify any active Gilsonite mining operation within 2 miles of the location 48 hours prior to any blasting during construction for this well.**

## **DOWNHOLE CONDITIONS OF APPROVAL**

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

### **SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL**

- An approved Sundry Notice is required before adding any oil to the drilling mud.
- A formation integrity test shall be performed at the intermediate casing shoe.
- A Cement Bond Log (CBL) shall be run in the production casing from the TD to the top of cement. A field copy of the CBL shall be submitted to the BLM Vernal Field Office for review.

### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. 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. Any changes in operation must have prior approval from the BLM, Vernal Field Office Petroleum Engineers.
- 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.**
- 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 lessee/operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled and analyzed (a copy of the analyses to be submitted to the BLM Field Office in Vernal, Utah).
- All oil and gas shows shall be adequately tested for commercial possibilities, reported, and protected.
- The lessee/operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, 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.
- All shows of fresh water and minerals shall be reported and protected. A sample shall be taken of any water flows and a water analysis furnished the BLM, Vernal Field Office. All oil and gas shows shall be adequately tested for commercial possibilities, reported, and protected.
- 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.
- 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.
- Any change in the program shall be approved by the BLM, Vernal Field Office. "Sundry Notices and Reports on Wells" (Form BLM 3160-5) shall be filed for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
- Emergency approval may be obtained orally, but such approval does not waive the written report requirement. 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 pursuant to Onshore Oil & Gas Order No. 1 of 43 CFR 3164.1 and prior approval by the BLM, Vernal Field Office.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- 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.

- A cement bond log (CBL) will be run from the production casing shoe to the surface casing shoe 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 in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- 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.
- All measurement points shall be identified as point of sales or allocation for royalty determination prior to the installation of facilities.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The 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.
- 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.
- This APD is approved subject to the requirement that, shall 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 Field Office Petroleum Engineers.

- 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.
- 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

**CONFIDENTIAL**

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		5. LEASE DESIGNATION AND SERIAL NUMBER: <b>UTU-0807</b>
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: <b>UTE INDIAN TRIBE</b>
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		7. UNIT or CA AGREEMENT NAME: <b>WONSITS VALLEY UNIT</b>
2. NAME OF OPERATOR: <b>QEP UINTA BASIN, INC</b>		8. WELL NAME and NUMBER: <b>WV 11AML-14-8-21</b>
3. ADDRESS OF OPERATOR: <b>1571 E. 1700 S.</b> CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>		9. API NUMBER: <b>4304738049</b>
PHONE NUMBER: <b>(435) 781-4031</b>		10. FIELD AND POOL, OR WILDCAT: <b>WONSITS VALLEY</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>2601' FSL 2611' FEL</b>		COUNTY: <b>UINTAH</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWSE 14 8S 21E</b>		STATE: <b>UTAH</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> (Submit in Duplicate)  Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <b>APD EXTENSION</b>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
**QEP Uinta Basin, Inc. hereby requests a 1 year extension on the WV 11AML-14-8-21.**

Approved by the  
 Utah Division of  
 Oil, Gas and Mining

Date: 05-03-07  
 By: [Signature]

5.807  
 RM

NAME (PLEASE PRINT) <u>Laura Bills</u>	TITLE <u>Regulatory Assistant</u>
SIGNATURE <u>[Signature]</u>	DATE <u>4/27/2007</u>

(This space for State use only)

**RECEIVED**  
**MAY 02 2007**  
 DIV. OF OIL, GAS & MINING

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 43-047-38049  
**Well Name:** WV 11AML-14-8-21  
**Location:** 2601' FSL 2611' FEL, NWSE, SEC. 14 T8S R21E  
**Company Permit Issued to:** QEP UINTA BASIN, INC.  
**Date Original Permit Issued:** 5/4/2006

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 right-of-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

*Anna Bill*  
Signature

4/27/2007  
Date

Title: REGULATORY ASSISTANT

Representing: QEP UINTA BASIN, INC.

**CONFIDENTIAL**

**DIVISION OF OIL, GAS AND MINING**

**SPUDDING INFORMATION**

Name of Company: QUESTAR EXPLORATION & PRODUCTION COMPANY

Well Name: WV 11AD-14-8-21

Api No: 43-047-38049 Lease Type: FEDERAL

Section 14 Township 08S Range 21E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # RATHOLE

**SPUDDED:**

Date 11/17/07

Time 8:00 AM

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by RAYMOND PALLESEN

Telephone # (435) 880-7967

Date 11/19/07 Signed CHD

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir

Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well (Oil/Gas Well/Other)
2. Name of Operator (QUESTAR EXPLORATION & PRODUCTION CO.)
3. Address and Telephone No. (11002 EAST 17500 SOUTH - VERNAL, UT)
4. Location of Well (2601' FSL, 2611' FEL, NWSE, SEC 14-T8S-R21E)

5. Lease Designation and Serial No. (UTU-0807)
6. Indian, Allottee or Tribe Name (UTE INDIAN TRIBE)
7. If Unit or CA, Agreement Designation (WONSITS VALLEY UNIT)
8. Well Name and No. (WV 11AD 14 8 21)
9. API Well No. (43-047-38049)
10. Field and Pool, or Exploratory Area (WONSITS VALLEY)
11. County or Parish, State (UINTAH, UTAH)

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

Table with columns: TYPE OF SUBMISSION (Notice of Intent, Subsequent Report, Final Abandonment Notice) and TYPE OF ACTION (Abandonment, Recompletion, Plugging Back, Casing Repair, Altering Casing, Other SPUD, Change of Plans, New Construction, Non-Routine Fracturing, Water Shut-Off, Conversion to Injection, Dispose Water)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)
On 11/17/07 - Drilled 80' of 26" conductor hole. Set 20" conductor pipe. Cement w/ Ready Mix.

RECEIVED DEC 03 2007 DIV. OF OIL, GAS & MINING

3 - BLM, 2- Utah OG&M, 1 - Denver, 1 - file Word file-server

14. I hereby certify that the foregoing is true and correct. Signed Dahn F. Caldwell Office Administrator II Date 11/26/07

(This space for Federal or State office use) Approved by: Title Date

Title 18 U.S.C. Section 1001, makes 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.

CONFIDENTIAL

OPERATOR: Questar Exploration & Production Co.  
ADDRESS: 11002 E. 17500 S.  
Vernal, Utah 84078-8526 (435)781-4342

OPERATOR ACCT. No. N-5085

ENTITY ACTION FORM - FORM 6

Action Code	Current Entity No.	New Entity No.	API Number	Well Name	QQ	SC	TP	RG	County	Spud Date	Effective Date
B	99999	14864	43-047-38049	WV 11AD 14 8 21	NWSE	14	8S	21E	Uintah	11/17/2007	12/31/07

WELL 1 COMMENTS: MVRD = WSMVM

CONFIDENTIAL

WELL 2 COMMENTS:

WELL 3 COMMENTS:

WELL 4 COMMENTS:

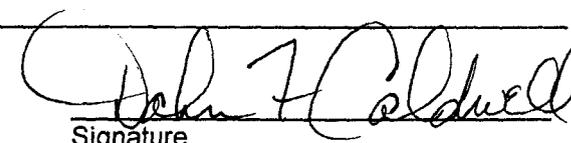
WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)

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

NOTE: Use COMMENT section to explain why each Action Code was selected

(3/89)

  
Signature

Office Administrator II 11/26/07  
Title Date

Phone No. (435)781-4342

RECEIVED

DEC 03 2007

DIV. OF OIL, GAS & MINING

CONFIDENTIAL

Form 3160-5  
(November 1994)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

5. Lease Serial No.

UTU-0807

6. If Indian, Allottee or Tribe Name

UTE INDIAN TRIBE

7. If Unit or CA/Agreement, Name and/or No.

WONSITS VALLEY UNIT

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

QUESTAR EXPLORATION & PRODUCTION, CO. Contact: Jan Nelson

3a. Address

11002 E. 17500 S. VERNAL, UT 84078

3b. Phone No. (include area code)

435-781-4331

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2601' FSL 2611' FEL, NWSE, SECTION 14, T8S, R21E

8. Well Name and No.

WV 11AD-14-8-21

9. API Well No.

43-047-38049

10. Field and Pool, or Exploratory Area

WONSITS VALLEY

11. County or Parish, State

UINTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input type="checkbox"/> Other _____
	<input checked="" type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

QUESTAR EXPLORATION AND PRODUCTION COMPANY (QEP) REQUEST PERMISSION TO CHANGE THE CASING PROGRAM, CEMENT PROGRAM, BOP AND DRILLING FLUID IN ORDER TO HAVE A SAFER OPERATION, ENHANCE DRILLING EFFICIENCY AND CAPTURE COST SAVINGS.  
PLEASE NOTE THAT THE DRILLING FLUID IN THE INTERVAL 500' TO 5,300' WILL BE AIR/MIST.AERATED SALT WATER.

ATTACHED IS A REVISED DRILLING PLAN. CEMENT, BOP DIAGRAM, DRILLING FLUIDS PROGRAM AND WELLBORE DIAGRAM.

FOR TECHNICAL QUESTIONS, PLEASE CONTACT JIM DAVIDSON, CHIEF DRILLING ENGINEER FOR QEP/UT (303) 308-3090.

**FOR RECORD ONLY**

RECEIVED

JAN 25 2008

DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Laura Bills

Title

Regulatory Affairs

Signature

*Laura Bills*

Date

January 22, 2008

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

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

Office

Title 18 U.S.C. Section 1001, makes 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.

(Instructions on reverse)

**CONFIDENTIAL**

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	2,710'
Wasatch	6,030'
Mesaverde	9,070'
Sego	11,495'
Castlegate	11,650'
Blackhawk	11,978'
Mancos Shale	12,434'
Mancos B	12,858'
Frontier	15,564'
Dakota Silt	16,456'
Dakota	16,658'
TD	17,150'

**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>
Gas	Wasatch	6,030'
Gas	Mesaverde	9,070'
Gas	Blackhawk	11,978'
Gas	Mancos Shale	12,434'
Gas	Mancos B	12,858'
Gas	Dakota	16,658'

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.

## DRILLING PROGRAM

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 # A36125 (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 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. 13-5/8" 2000 psi annular BOP (schematic included) from surface casing seat to 9-5/8" casing point.
- B. 11" or 13-5/8" 10,000 psi double gate, 10,000 psi single gate, 10,000 psi annular BOP (schematic included) from 9-5/8" casing point to total depth. The choice of BOP stacks is based on the drilling contractor's availability.
- C. Functional test daily
- D. 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.
- E. 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 10M system and individual components shall be operable as designed.

### 4. **Casing Design:**

DRILLING PROGRAM

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Wt.	Grade	Thread	Cond.
26"	20"	sfc	40-60'	Steel	Cond.	None	Used
17-1/2"	13-3/8"	sfc	500'	54.5	K-55	STC	New
12-1/4"	9-5/8"	sfc	5300'	47	HCP-110	Flush Jnt **	New
8-1/2"	7"	sfc'	9,000'	26	HCP-110	LTC	New
8-1/2"	7"	9,000'	12,500'	29* SDrift	HCP-110	LTC	New
6-1/8"	4-1/2"	sfc	13,000'	15.1	P-110	LTC	New
6-1/8"	4-1/2"	13,000'	15,000'	15.1	Q-125	LTC	New
6-1/8"	4-1/2"	15,000'	17,150'	17.1	Q-125	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
13-3/8"	54.5 lb.	K-55	STC	1,130 psi	2,730 psi	547,000 lb.
9-5/8"	47 lb.	HCP-110	LTC	7,100 psi	9,440 psi	1,213,000 lb.
7"	29 lb.*	HCP-110	LTC	9,200 psi	11,220 psi	797,000 lb.
4-1/2"	15.1 lb.	P-110	LTC	14,350 psi***	14,420 psi	406,000 lb.
4-1/2"	15.1 lb.	Q-125	LTC	15,840 psi***	16,380 psi	438,000 lb.
4-1/2"	17.1 lb.	Q-125	LTC	19,010 psi***	18,180 psi	493,000 lb.

\* Special Drift

\*\* Flush Jnt – VAM SLIJ II

MINIMUM DESIGN FACTORS:

COLLAPSE: 1.125-1.3\*\*\*

BURST: 1.10

DRILLING PROGRAM

TENSION: 1.80

Area Fracture Gradient: 0.9 psi/foot  
Maximum anticipated mud weight: 15.4 ppg  
Maximum surface treating pressure: 12,500 psi

5. **Auxiliary Equipment**

- A. Kelly Cock – yes
- B. Float at the bit – yes
- 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  
If drilling with air the following will be used:
  - 1. The blooie line shall be at least 6” in diameter and extend at least 100’ from the well bore into the reserve/blooie pit.
  - 2. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500’).
  - 3. Compressor shall be tied directly to the blooie line through a manifold.
  - 4. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

Surface hole and the first intermediate hole section (12-1/4” hole) will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below the first intermediate casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is intended to use oil base mud in the production hole. Maximum anticipated mud weight is 15.4 ppg. The high mud density is required more for hole stability and not necessarily pore pressure.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

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

## DRILLING PROGRAM

### 6. Testing, logging and coring program

- A. Cores – none anticipated
- B. DST – none anticipated
- C. Logging – Mud logging – 4500' to TD  
GR-SP-Induction, Neutron Density, FMI
- D. Formation and Completion Interval: Mancos interval, final determination of completion will be made by analysis of logs.  
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

### 7. Cementing Program

#### **20" Conductor:**

Cement to surface with construction cement.

#### **13-3/8" Surface Casing: sfc – 500' (MD)**

**Slurry:** 0' – 500'. 610 sxs (731 cu ft) Premium cement + 0.25 lbs/sk Flocele + 2% CaCl<sub>2</sub>  
Slurry wt: 15.6 ppg, slurry yield: 1.20 ft<sup>3</sup>/sx, slurry volume: 17-1/2" hole + 100% excess.

#### **9-5/8" Intermediate Casing: sfc - 5300' (MD)**

**Lead Slurry:** 0' – 4,900'. 1409 sks (2072 cu. ft.) Foamed Lead 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset + 1.5 % Zonesealant 2000 (Foamer) Slurry wt: 14.3 ppg, (unfoamed) or 11.0 ppg. (foamed) Slurry yield: 1.47 ft<sup>3</sup>/sk (unfoamed), Slurry volume: 12-1/4" hole + 35 % excess.

**Tail Slurry:** 4,900' – 5,300'. 115 sks (30 bbls) Tail 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset Slurry wt: 14.3 ppg, Slurry yield: 1.47 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 35% excess.

#### **7" Intermediate Casing: sfc - 12,500' (MD)**

**Foamed Lead Slurry 2:** sfc' – 12,500'. 1246 sks (1982 cu ft) 50/50 Poz Premium + 20% SSA-1 + 3 % silicalite compacted + 3% Silicalite Compacted + 0.5% Halad 344 + 0.2% Halad 413 + 0.1% HR-12 + 0.7% Super CBL + 0.2% Suspend Slurry wt: 14.0 ppg, Slurry yield: 1.59 ft<sup>3</sup>/sk, Slurry volume: 8-1/2" hole + 25% excess.

## DRILLING PROGRAM

### **4-1/2" Production Casing: sfc - 17,150' (MD)**

**Lead/Tail Slurry:** 6,000 - 17,150'. 951 sks (1418 cu ft) Premium Cement + 17.5% SSA-1, + 4% Microbond HT, + 0.2% Halad 344 + 0.5% Halad 413, + 0.3% CFR-3, + 0.9% HR-12, + 0.2% Super CBL, + 0.2% Suspend HT, 17.5% SSA-2. Slurry wt: 16.2 ppg, Slurry yield: 1.49 ft<sup>3</sup>/sk, Slurry volume: 6-1/8" hole + 35% in open hole section.

\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface on the intermediate string and 6,000' 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.

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

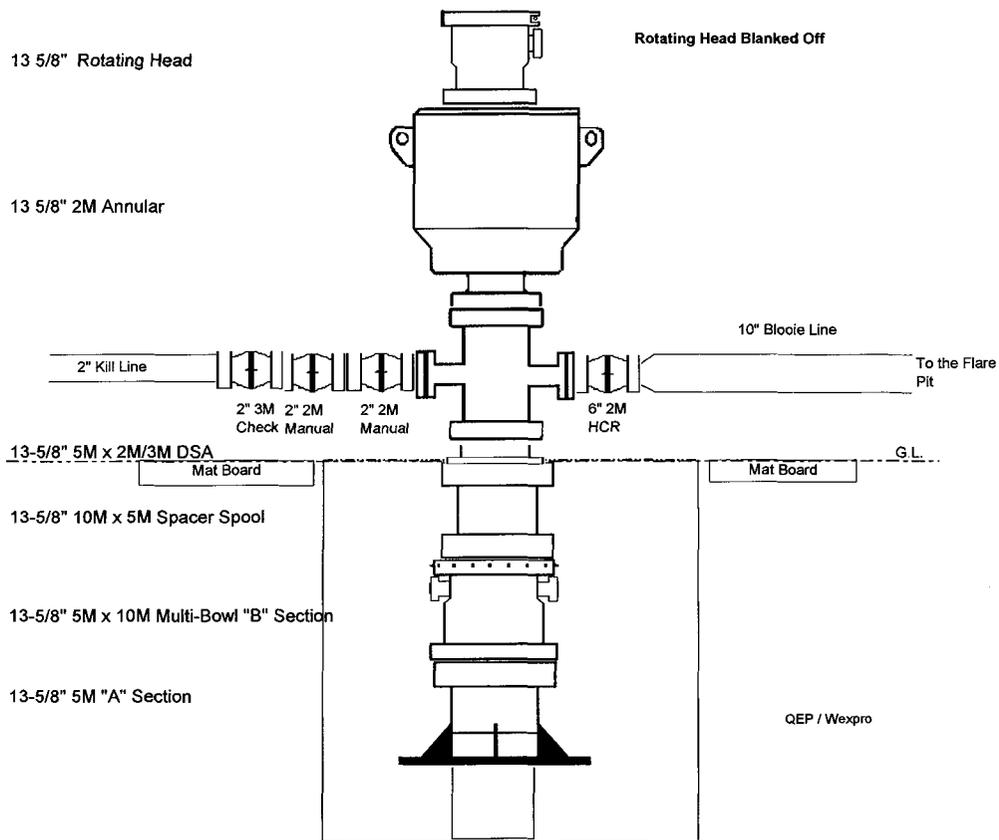
No H<sub>2</sub>S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 10,000 psi to 11,000 psi based on pressure transient work on the GB 9D-27-8-21. Maximum anticipated bottom hole temperature is 300° - 310° F.

### **9. Reclamation for Oil Base Cuttings**

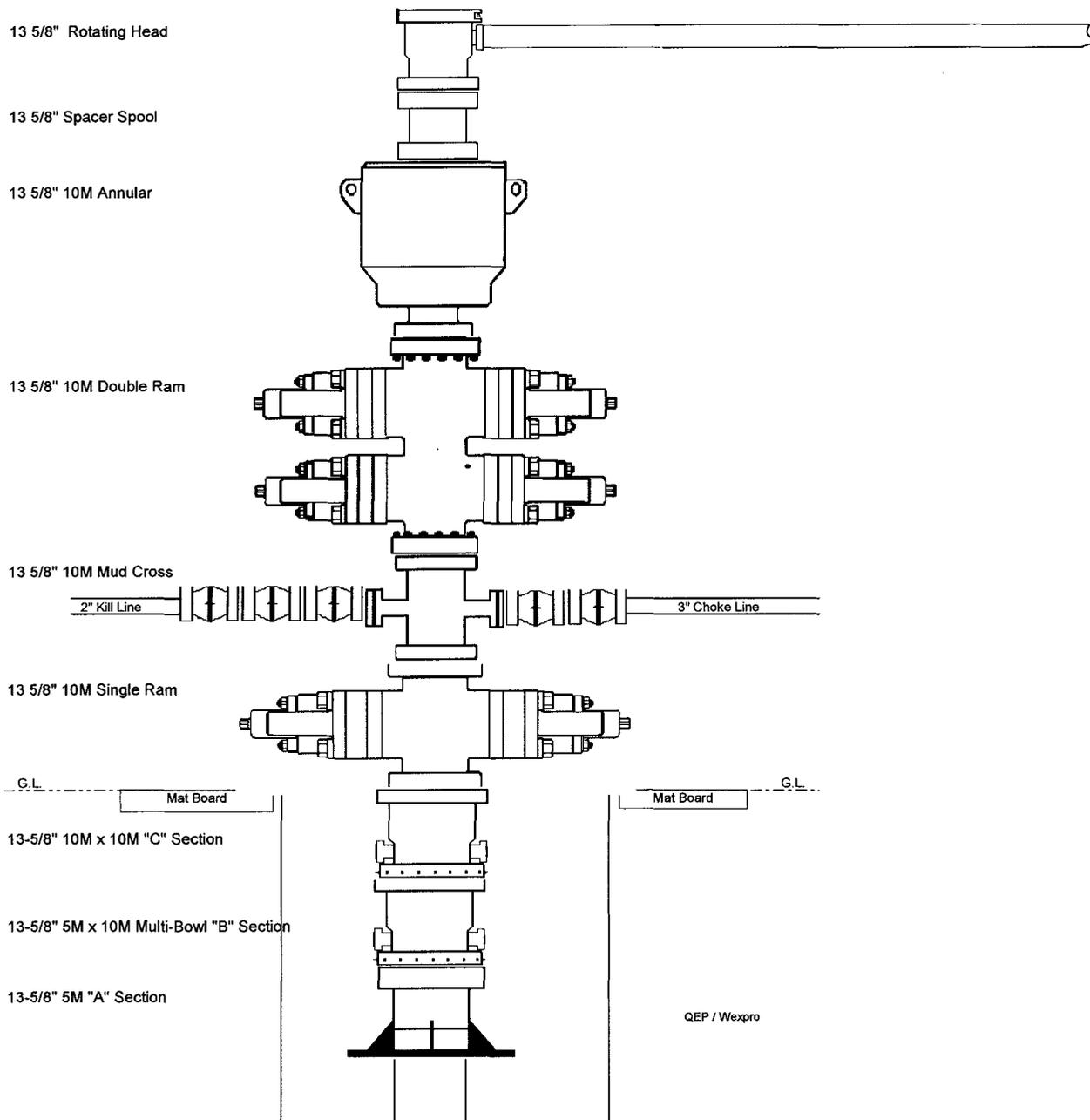
Prior to drilling out the 7" casing with oil base mud, the reserve pit will be separated at the dike with an additional liner to form 2 separate reserve pits.

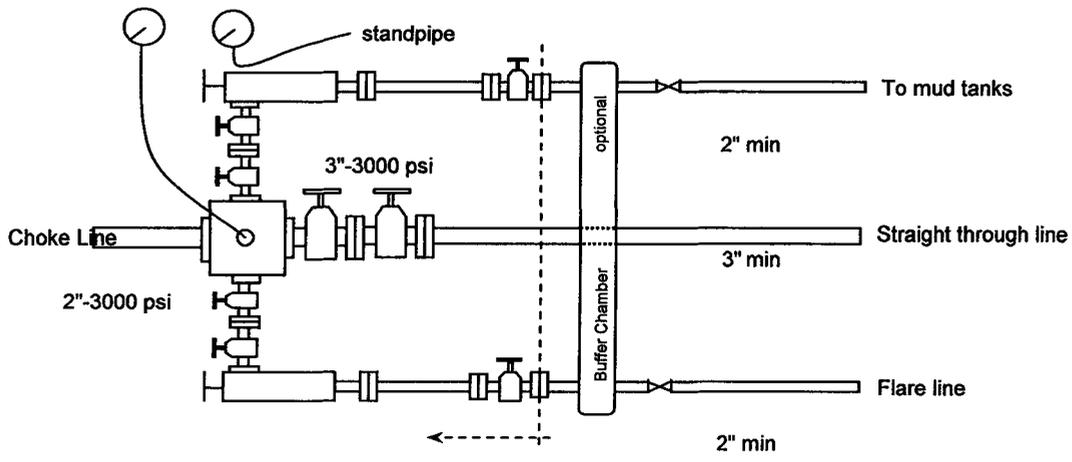
Cuttings in the production hole (6-1/8" hole section) will be drilled with oil base mud. During the drilling operations, the cuttings will be collected and held in a steel 500 bbl collection tank on the drilling site. After the rig has completed drilling operations, the collected cuttings will be mixed and encapsulated with Solibond or an equivalent process in one of the reserve pits. The encapsulated cuttings will be left on site in the reclaimed reserve pit. The other reserve pit will dry out from water base cuttings and this pit will be reclaimed as well using conventional methods. Please review the attached Solibond process and proposal.

### DRILLING PROGRAM



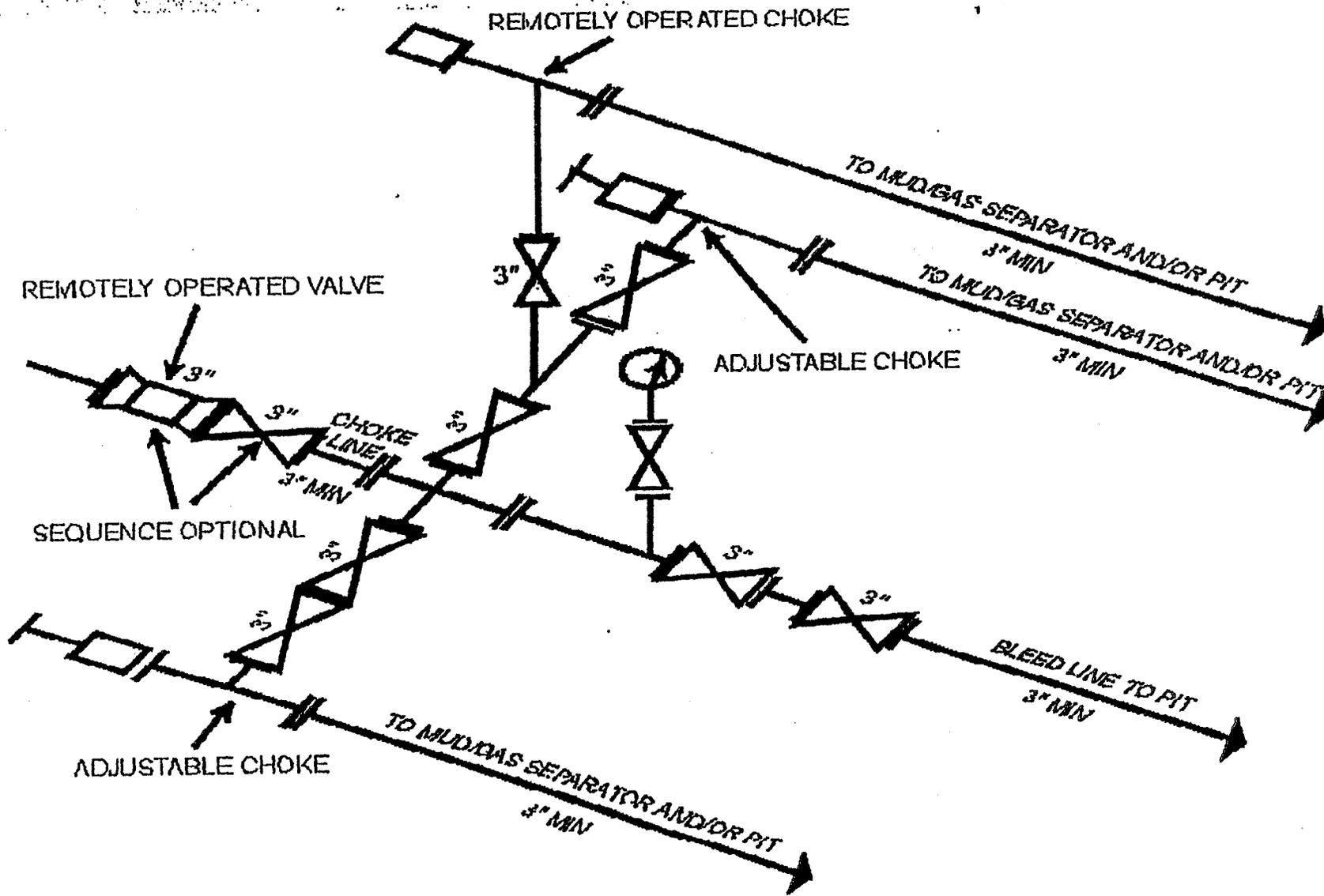
### DRILLING PROGRAM





Choke Manifold (Typical)

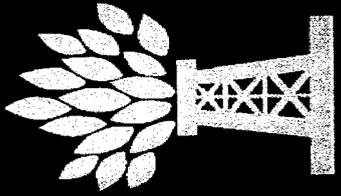
Attachment I. Diagrams of Choke Manifold Equipment



I-4-10M and 15M Choke Manifold Equipment -- Configuration of chokes may vary

[54 FR 39528, Sept. 27, 1989]

Last Updated March 25, 1997 by John Broderick



**NEWARK**

**DRILLING FLUIDS, LLC**

**Questar  
Exploration &  
Production Company**

***WV 11AD-14-8-21***

***Sec 14-T8S-R21E  
Uintah County, Utah***

***Drilling Fluids Program***

***410 17<sup>th</sup> Street, Suite 460 Denver, CO 80202  
(303) 623-2205 (720) 904-7970 Fax***



# Newpark Drilling Fluids, LP

410 17<sup>th</sup> Street, Suite 460

■ Denver, Colorado 80202

■ (303) 623-2205

■ FAX (720) 904-7970

January 18, 2008

Mr. Jim Davidson  
Chief Drilling Engineer  
Questar Exploration & Production  
1331 17th Street, Suite 800  
Denver, Colorado 80202

RE: WV 11AD-14-8-21  
Sec 14-T8S-R21E  
Uintah Co, Utah

Mr. Davidson:

Newpark Drilling Fluids, LP is pleased to present the enclosed revised recommended drilling fluids program for the WV 11AD-14-8-21 well to be drilled in Uintah County, Utah. This program is for drilling with Aerated Saltwater in the 1st intermediate to 6000 ft, a polymer fluid system in the 2nd intermediate interval to 12,300 ft, then to T.D. at 16,875 ft with OBM.

The Surface Interval will be pre-set at a depth of 500 ft.

For the 1st intermediate Interval, an aerated saltwater drilling fluid is planned.

Brine kill pills may be needed for trips, logs, and casing operations, depending on pressure encountered while drilling. Trona water flows in this area may require a mud weight of 9.5-9.8 ppg to control. Required mud weight at interval T.D. at 5,300' is expected to be in the 8.8-9.0 ppg range.

In the 2nd intermediate interval, drill out with fresh water or mud-up before drilling out, as hole conditions dictate. When a mud-up is needed, mud-up to a NewPHPA/Polymer system. Mud weight in this interval is expected to be in the 11.2-11.4 ppg range at the 12,500 ft liner interval T.D.

In the Production interval, displace to a 12.0-12.5 ppg OptiDrill OBM system. Maintain fluid density as low as possible to increase penetration rates and reduce the possibility of lost circulation. Use high weight pills for well control during; trips, logs, and casing operations. Mud weight at T.D. is expected to be at +/-15.5 ppg.

The projected drilling time for this project is 65-70 days with an estimated material and engineering cost of \$500,000.00 assuming no unusual delays or problems are encountered. The estimate is based on minimal losses and a 15.0 ppg mud weight at TD. Costs will increase dramatically if severe losses are encountered.

All sack material and bulk barite will be furnished from our Grand Junction, Colorado facility, with OBM supplied from Newpark's Boulder, WY facility.

If you have any questions following your review of this proposal, please call.

Regards,

Estes Ward  
Operations Manager  
Newpark Drilling Fluids, LP

# Project Summary

**Questar**  
**Exploration & Production**  
**WV 11AD-14-8-21**  
**Sec 23-T8S-R21E**  
**Uintah, County Utah**

Depth (ft)	Formations	Interval Comments	Mud Weight (ppg)	Mud Properties
500'	Uinta Surface T.D.	Hole size: 17 1/2" / Casing: 13 3/8"  <b>AIR DRILLED</b>	NA	NA
2,710'	Green River Mahogeny	<b>Aerated Salt Water</b> Hole size: 11.0" / Casing: 9 5/8" Flush Joint  Drill out with saltwater aerating as needed to maintain circulation. When water is encountered reduce air as needed to control the flow. Pump pre-hydrated NewGel or Flowzan /SaltGelsweeps for increased hole cleaning and for any tight hole and/or torque. For trips, spot heavy brine if needed for trona flow, and at intermediate T.D. check hole conditions and spot high viscosity mud if needed. If hole conditions dictate a mud-up, base the system on the chloride content of the fluid.	9.5-10.0	Vis (sec/qt): Water PV (cp): NA YP (#s/100ft <sup>2</sup> ): NA FL (ml/30 min): NC LGS %: < 1% pH: 10.5-10.8 CI (mg/l): 150-200K
5,030'	Wasatch 1st Intermediate T.D.	Mud weight required at T.D. is expected to be in the 8.8-9.0 ppg range	9.5-10.0	
9,070'	Mesa Verde	<b>NewPHPA/Polymer</b> Hole size: 8.5" / Liner: 7" Mud up as hole conditions dictate to a NewPHPA/Polymer system. Maintain properties as outlined in increasing the PHPA concentration to 1 ppb. Lost circulation may be a problem in this interval. If lost circulation is encountered, pump LCM pills as needed. If LCM pills will not control losses, by-pass the shakers and increase the LCM concentration in the system as needed. If severe lost circulation is encountered, consider a DynaPlug squeeze. Hole instability may be encountered in the Mesa Verde. Monitor torque, pump pressure, connection fill, and trip conditions for indications of hole instability and consider adding Asphalt if hole conditions dictate.	8.8 10.0 11.0 11.2 11.2	Vis (sec/qt): 40-45 PV (cp) : 12-20 YP (#s/100ft <sup>2</sup> ) : 10-12 FL (ml/30 min): 6-8 LGS %: 3-5 pH: 10.0-10.5 CI (mg/l): 11-15K PHPA: 1.0 ppb
11,495'	Sego Bucktongue			
11,650'	Castlegate			
11,978'	Blackhawk			
12,434'	Mancos Shale			
12,500' +/-	2nd Intermediate T.D.			
12,858'	Mancos B	<b>OptiDrill OBM</b> Hole size: 6-1/8" / Casing: 4-1/2" Drill out with the OptiDrill system, treating cement contamination as needed with OptiWet to prevent shaker blinding. Maintain hole cleaning during high ROP's with high viscosity sweeps. Use a 1:1 ratio of OptiVis RM and OptiVis. CO2 in the gas stream while drilling under balanced will require additional Lime, emulsifiers and wetting agent.  Maintain mud weight as needed for well control. Spot high weight ECD pills for trips, logs, and casing operations.	11.2 15.5	PV (cp): 15-25 YP (lbs/100ft <sup>2</sup> ): 8-10 HPHT (mls/30 min.): <20 O/W : 80:20 - 85:15 ES: 500+ Lime: 2-4 ppb LGS %: < 6
15,564'	Frontier equiv. Dakota Silt			
16,658'	Dakota			
17,150'	Total Depth			



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# Project Summary

Questar  
 Exploration & Production  
 WV 11AD-14-8-21  
 Sec 23-T8S-R21E  
 Uintah, County Utah

## DRILLING FLUID PROPERTIES

### Surface Hole: Air Drilled

Hole Size (in)	TVD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	Total Solids (%)
17 1/2 "	0-500'	NA	NA	NA	NA	NA

### 1st Intermediate Hole: Aerated Saltwater

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	Chloride Mg/l (x1000)	LGS Solids (%)
11"	500'-5,300'	9.5-10.0	NA	NA	NA	150-200	< 1%

### 2nd Intermediate Interval: NewPHPA/Polymer

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	pH	LGS Solids (%)
8 1/2"	5,300'-8,000'	8.5-8.8	6-12	6-10	8-10	10.0-11.0	< 1%
8 1/2 "	8,000'-12,500'	11.2-11.4	12-18	12-15	6-8	10.0-11.0	3-6

### Production Interval: OptiDrill OBM

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	O/W Ratio (%)	HPHT Fluid Loss (ml/30min)	CaCL (mg/l) X 10,000	Electrical Stability (mv)	LGS Solids (%)
6-1/8 "	12,500'-17,150'	15.0-15.5	20-30	8-10	85/15	12-15	250-350	500 +	3-6

- Drilling fluid properties are guidelines only.
- Mud weights for guidelines only, allow hole conditions to dictate actual mud weights.
- Hole conditions should be closely monitored and product mix adjusted accordingly.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# 1st Intermediate Interval

## 11" Hole (500' - 5,300')

**Questar**  
**Exploration & Production**  
**WV 11AD-14-8-21**  
**Sec 23-T8S-R21E**  
**Uintah, County Utah**

### 1st Intermediate Interval Drilling Fluid Properties

Depth Interval (TVD)	Mud Weight (ppg)	Viscosity (sec/qt)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	pH	API Fluid Loss (ml/30min)	Hardness (Mg/l)	Low Gravity Solids	Chlorides (Mg/l (x1000))
500'-5,300'+/-	9.5-10.0	NA	NA	NA	8.0-10.0	NA	NA	<1.0	150-200

- Drill out with Saltwater maintaining chlorides as needed for fluid weight. Aerate the fluid as needed to maintain circulation.
- If a water flow is encountered, balance air and fluid weight as needed to maintain circulation
- Pump pre-hydrated NewGel and/or Flowzan/SaltGel sweeps for increased hole cleaning, along with LCM sweeps for seepage (Paper LCM while drilling with water)
- If water flows are encountered, spot heavy brine pills for trips, logs and casing operations.
- If hole conditions dictate a mud-up, system used will depend on chloride concentration of the fluid.
- Offset information indicates the 1st major loss zone to be at +/- 3600 ft.
- Shallow gas/overpressure was encountered on some offsets in the area at 3,700-4,000'. A 9.5-9.9 ppg fluid was needed to control pressure.

<i>Challenges:</i>	<i>Strategies:</i>
Gravel/Unconsolidated formation	If encountered, pump sweeps of pre-hydrated NewGel with a viscosity of 150 –300 sec/qt.
Water Flows (Trona)	If water flows become excessive, control hydrostatic as needed with air additions and fluid density.
Lost Circulation	While drilling with water, pump LCM sweeps consisting of paper. If drilling with mud, pump mixed LCM pills in the 20-30% LCM range.
Hole Cleaning	Pump sweeps on a regular basis and for any indications of insufficient hole cleaning. Circulate and pump sweeps before connections and for any anticipated down time.
Increase ROP with PDC Bits	Pump 20-40 bbl. Sweeps with NewEase 203, New100N, DynaDet, and SAPP. (FlexDrill Sweeps)
Hole Instability/Sloughing Shale	Consider a mud-up and Asphalt additions.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# 1st Intermediate Interval

## 11" Hole (500' - 5,300')

Questar  
Exploration & Production  
WV 11AD-14-8-21  
Sec 23-T8S-R21E  
Uintah, County Utah

---

---

### Offset Data:

- Wells in this area have encountered major losses at +/- 3600 ft.
- Gravel/unconsolidated formation has been encountered at 1380 ft.
- Gas/overpressure has been encountered at 3,700'-4,000'.

### Fluid Recommendations:

- Drill out cement, float collar and new formation. Test the integrity of the casing seat and squeeze if necessary.
- Drill out with Saltwater, aerating as needed to maintain circulation.
- If water is encountered, control flow with reduced air and fluid density.
- If a Trona Water flow is encountered additions of **Lime** and/or **Calcium Chloride** should be used to adjust alkalinities as needed.
- The use of a premix tank is highly recommended. Pre-Hydrate **NewGel** for use as sweeps and for viscosity when a mud up is needed. Fill premix tank with fresh water. Treat out hardness with **SodaAsh** as needed. Add 0.25-0.5 ppb **Caustic Soda** for a 10.0-10.5 pH. Begin additions of 20-25 ppb **NewGel** allow sufficient circulating time for maximum hydration. Add 1.0-2.0 ppb **CFL II**. Then mix additional **NewGel** (30-40 ppb total) or a 120+ funnel viscosity. The pre-hydrated bentonite can be pumped from the premix to the pill tank and pumped downhole for sweeps or can be added slowly to the **Saltwater** for viscosity and rheology control.
- If penetration rates slow sweeps with **New 100N**, **NewEase 203**, **SAPP**, and **DynaDet** should be considered. (1% **New 100N**, 1% **NewEase 203**, 0.5-0.75 ppb **SAPP**, 0.2 % **DynaDet**). "**Flex Sweeps**"
- For trips, an increase in mud weight may be necessary to kill water flows. 9.8-10.0 ppg brine should be considered for this operation.
- Seepage and/or lost circulation may become a problem. For seepage while drilling with water, pump 20-30 bbl pills containing Paper LCM.
- If losses become severe, consider a mud up and LCM sweeps of **Cedar Fiber** and **FiberSeal** should be pumped and incorporated into the system as needed. If losses continue, increase coarse LCM in active system to 15-20%. If losses continue the use of a **DynaPlug** Squeeze is strongly recommended.
- At TD increase funnel viscosity for logs and casing operations as hole conditions dictate. Suggest funnel viscosity be increased to 45-50 sec/qt, before logging operations be attempted.
- At 5,300' ( intermediate T.D.) short trip, check hole conditions. If hole conditions dictate, add pre-hydrated **NewGel** from the premix tank to the active system to increase funnel viscosity to 45-50 sec/qt and spot in the open hole for logs and casing operations

**DRILL STRING PACK-OFF:** Rapid penetration rate during fast drilling often deteriorates to pack-off, a situation which can lead to lost circulation and/or stuck pipe. Pack-off is typically self-induced by exceeding the maximum rate of penetration for a given annular flow rate. The solution to this is to control the penetration rate to a level that the pumps can adequately clean the hole while maintaining rheological properties in line with existing hydraulic parameters.

**SOLIDS CONTROL:** It is of the utmost importance that the shale shakers and flow line cleaners be equipped with the finest screens possible, and yet handle the flow rate. The desander and desilter units should be evaluated periodically and serviced to maximize performance.



## Newpark Drilling Fluids, LP

410 17th Street, Suite 460  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

## 2nd Intermediate Interval 8 1/2" Hole (5,300' - 12,500')

Questar  
Exploration & Production  
WV 11AD-14-8-21  
Sec 23-T8S-R21E  
Uintah, County Utah

2nd Intermediate Interval Drilling Fluid Properties								
Depth Interval (TVD)	Mud Weight (ppg)	Viscosity (sec/qt)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	pH	API Fluid Loss (ml/30min)	Hardness (Mg/l)	Low Gravity Solids
5,300'-8,000'	8.6-8.8	32-36	6-12	6-10	10.0-11.0	8-10	100+	4-6
8,000'-12,500'	11.2-11.4	45-50	10-18	12-14	10.0-11.0	6-8	100+	4-6

- Drill out with water and or mud as hole conditions dictate. After mud-up , allow the system to revert to a fresh water polymer system.
- As mud weight is increased, seepage losses can become severe. Treat with LCM pills as needed. If pill treatments will not contain the losses at reasonable levels, by-pass the shakers, retaining the pills and allowing the LCM concentration to increase as needed.
- Hole instability can occur in the Mesa Verde in this area. If encountered, consider adding Asphalt, building to a 4-6 ppb concentration.
- High pressure may be encountered in the Castlegate/Blackhawk. Monitor closely for increased pressure while drilling and use caution on trips to minimize possible swabbing.
- Mud weight at Liner Interval T.D. is expected to be in the 11.2-11.4 ppg range.

Challenges:	Strategies:
Hole Instability/Sloughing Shale	Consider 4-6 ppb Asphalt
Increase in Formation pressure	Monitor well conditions and increase density as needed with <b>NewBar</b> as needed.
Seepage/Lost Circulation	As mud weight is increased (10.0ppg +) seepage and losses may become a problem. For seepage pump 50 bbl sweeps with 5-10 ppb <b>DynaFiber</b> and 10-20 ppb <b>NewCarb</b> as needed. For partial or total losses pump sweeps with 10-15 ppb <b>FiberSeal</b> and <b>Cedar Fiber</b> . Severity of losses will determine size and quantity of LCM added. If losses are not controlled with sweeps consider 10-15% LCM in active system. For severe losses the use of a <b>DynaPlug</b> squeeze should be considered.
Differential Sticking	Maintain mud weight as low as possible. Control Low Gravity Solids below 6%, and control fluid loss at 8-10 mls/30 min.
Increase ROP with PDC Bits	Pump 20-40 bbl. Sweeps with NewEase 203, New100N, DynaDet, and SAPP. (FlexDrill Sweeps)



### Newpark Drilling Fluids, LP

410 17th Street, Suite 460  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

## 2nd Intermediate Interval 8 1/2" Hole (5,300'-12,500')

Questar  
Exploration & Production  
WV 11AD-14-8-21  
Sec 23-T8S-R21E  
Uintah, County Utah

---

---

### Offset Data:

Wells in this area have experienced losses as mud weights are increased to control formation pressure. LCM sweeps are strongly recommended for this reason. Mud weights should be kept as low as practical but increases to 11.2 ppg may be required by 2nd Intermediate TD at 12,500'.

- Loss zones on offset wells were at 9200 ft and 9500 ft.

### Fluid Recommendations:

- Drill out cement, float collar and new formation with the system from the previous interval. Test the integrity of the casing seat and squeeze if necessary.
- Drill out with water and or mud. If drilling out with water consider a mud up by +/- 7500 ft or as hole conditions dictate.
- Begin additions of 0.5-1.0 ppb **NewPHPA** and maintain throughout the interval.
- Maintain viscosity with PreHydrated **NewGel** until chlorides have dropped below 5000-7000 mg/l. After chlorides have dropped **NewGel** will not need to be pre-hydrated and can be added directly to the system.
- Begin additions of **NewPHPA**. Concentration of **NewPHPA** should be maintained at 0.5-1.0 ppb throughout the interval. As mud weight increases additions of **PHPA** should be switched from **NewPHPA DLMW** to the shorter chain **NewPHPA DSL**.
- If hole conditions dictate, consider 4-6 ppb Asphalt.
- If penetration rates slow sweeps with **New 100N**, **NewEase 203**, **SAPP**, and **DynaDet** should be considered. (1% **New 100N**, 1% **NewEase 203**, 0.5-0.75 ppb **SAPP**, 0.2 % **DynaDet**). "**Flex Sweeps**"
- Increase mud weight as needed to control formation pressures as needed. Mud weights should be maintained as low as practical to reduce chance of losses and differential sticking. Increase mud weight as needed with **NewBar**.
- As density increases additions of **NewEdge** and/or **DrillThin** should be added for rheology control.
- As bottom hole temperatures increase and additional fluid loss control is desired supplement the **NewPAC** with **DynaPlex** for fluid loss control Lower API filtrate to 6-8 cc's with additions of **NewPAC** and **DynaPlex**.
- As mud weight is increased seepage and/or lost circulation may become a problem. For seepage pump 20-30 bbl pills containing a combination of **NewCarb** and **DynaFiber** mixed at a 2:1 ratio. If partial or total returns are encountered, LCM sweeps with a varied size distribution including **Cedar Fiber** and **Fiber Seal**, **PhenoSeal** and other assorted sizes should be considered and incorporated into the system as needed. 20-25% LCM in the active system may be required. The type, size and quantity of LCM used will depend on the severity of losses. If losses are severe a **DynaPlug** squeeze should be considered.
- At TD increase funnel viscosity for logs and casing operations as hole conditions dictate. Suggest funnel viscosity be increased to 50-55 sec/qt, before logging or casing operations be attempted.
- While circulating casing it is recommended to reduce Yield Points for cementing operations.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

# Production Interval

## 6 1/8" Hole (12,500'-17,150')

**Questar**  
**Exploration & Production**  
WV 11AD-14-8-21  
Sec 23-T8S-R21E  
**Uintah, County Utah**

### Production Interval Drilling Fluid Properties

Depth Interval (TVD)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	O/W Ratio %	HTHP Fluid Loss (ml/30min)	Excess Lime (PPB)	Electrical Stability (MV)	Low Gravity Solids	CaCl Mg/l Water
12,500'-17,150'	15.0-15.5	25-35	8-10	85:15	12-15	2-4	500+	< 6	300K

#### Drilling Fluid Recommendations: (12,500'-17,150')

- Displace to a OptiDrill OBM after finishing the casing job at 12,500'.
- After displacement, maintain the OptiDrill system within the parameters outlined above.
- Offsets in the area have encountered high rates of seepage in this interval. If indications of seepage are observed, sweeps of **NewCarb C**, **Dynafiber C & M**, **NewSeal**, and **CyberSeal** are recommended. Mixing ratios are recommended to be at 5:1 **NewCarb M** to **DynaFiber**, **NewSeal**, and **CyberSeal**. If losses continue to be a problem, consider trying different sizes and combinations until seepage is slowed.
- Maintain rheology low to reduce ECD values and reduce surge and swab during connections and trips.
- Drill as underbalanced as possible to help prevent losses and increase penetration rates.
- For pressure control, spot high weight pills with an equivalent mud weight to drilling ECD's. On trips in, stage these pills out and divert to storage for further use. High weight pills in excess of the drilling ECD should be avoided due to possible lost circulation.

Challenges	Strategies
Displacement	<ul style="list-style-type: none"> <li>• Have 1200-1300 bbls of OBM volume on location along with a pump capable of keeping up with displacement rates.</li> <li>• Pump a 10-20 bbl viscosified OBM spacer ahead of the OptiDrill (enough for 500 ft + separation)</li> <li>• A steady pump rate for either turbulent or plug flow should be used. Reciprocate and rotate to assist in minimizing channeling.</li> <li>• Do not shut down once displacement commences.</li> <li>• Should any contamination occur, isolate the contaminated fluid for reconditioning.</li> </ul>
Seepage/lost Circulation.	Pump LCM sweeps when seepage and/or losses are indicated. Sweeps should be a mixture of , NewCarb, DynaFiber, NewSeal, and CyberSeal. If lost returns are encountered, consider a Di-aseal M or cross linked polymer squeeze.
Maintaining Oil wet solids	For every 1.0 ppg mud weight increase, mix 0.02 gal/bbl OptiWet
Pressure control	<ul style="list-style-type: none"> <li>• Spot weighted pills calculated to give a bottom hole pressure equal to drilling ECD.</li> <li>• Do not exceed drilling bottom hole pressure with the ECD pill. Lost circulation has been a problem on offset wells.</li> <li>• Stage weighted pills out of the hole and recover for future use.</li> </ul>



## Newpark Drilling Fluids, LP

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# Production Interval

## 6 1/8" Hole (12,500'-17,150')

Questar  
Exploration & Production  
WV 11AD-14-8-21  
Sec 23-T8S-R21E  
Uintah, County Utah

---

---

### Maintenance Procedure:

**HPHT** - Maintain HPHT values within programmed parameters. Additions of **OptiMul** and **OptiPlus**, at recommended concentrations should maintain the HTHP at recommended levels. If hole conditions indicate a need for lower HPHT values, **Opti G** at 2-4 ppb is recommended.

**Electrical Stability**— Electrical stability should be used as a guide not as an absolute in determining maintenance requirements. Actual values are not critical but should be observed for trends or changes. Decreases in electrical stability should be noted along with other mud properties to determine treatments. To increase electrical stability add emulsifiers and wetting agents **OptiMul** and **OptiPlus** or decrease water content.

**Oil/Water Ratio** - Maintain the oil/water ratio in the 90:10-80:20 range depending on mud weight and condition.. Higher water content will decrease the amount of **OptiVis** needed for rheology.

**Mud weight** - Maintain minimum fluid densities with solids equipment. Monitor hole conditions and all drilling parameters closely for indications of increases in formation pressures and adjust fluid densities accordingly. Drilling with a minimum amount of overbalance will reduce the possibility of losing returns and/or of differentially sticking the drill string. Mud weight on offset wells was in the 15.0-15.5 ppg range at T.D.

**Rheology** - Maintain solids as low as possible. Increase rheology as needed for hole cleaning with a combination of **OptiVis (Bentone 910)** and **Opti Vis RM or Opti Vis PS** and water content.

**Lime** - Maintain the excess Lime at 2-3 ppb excess.

**Hole cleaning** - Calculate rheology requirements based on ROP, pump rates and hole conditions. Adjust as needed .

**Mud losses downhole**—Monitor ECD's with Hy-Calc, maintaining the lowest values possible. If losses are encountered; sweeps containing **NewCarb, DynaFiber, Opti-G, and NewSeal** should be circulated to aid in the prevention of losses. If seepage losses continue and/or become severe, consider spotting a pill with **Magma Fiber (Fine & Regular)** and the above formulation. Keep the hole full at all times, and avoid excessive swabbing and/or surge actions when tripping.

**Solids Control** - Maintain low gravity solids at 4-6 % by volume. The high performance shakers should be equipped with the finest mesh screens that will handle the circulating volume and not cut barite out.

**Water Contamination**— Keep all water sources off the mud pits. If contamination occurs, treat with emulsifiers and Calcium Chloride as needed.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

**Production Interval**  
**6 1/8" Hole (12,500'-17,150')**

*Questar*  
**Exploration & Production**  
WV 11AD-14-8-21  
**Sec 23-T8S-R21E**  
**Uintah, County Utah**

**Recommended materials for relaxed filtrate OptiDrill system :**  
**( 85:15 Oil/Water Ratio)**

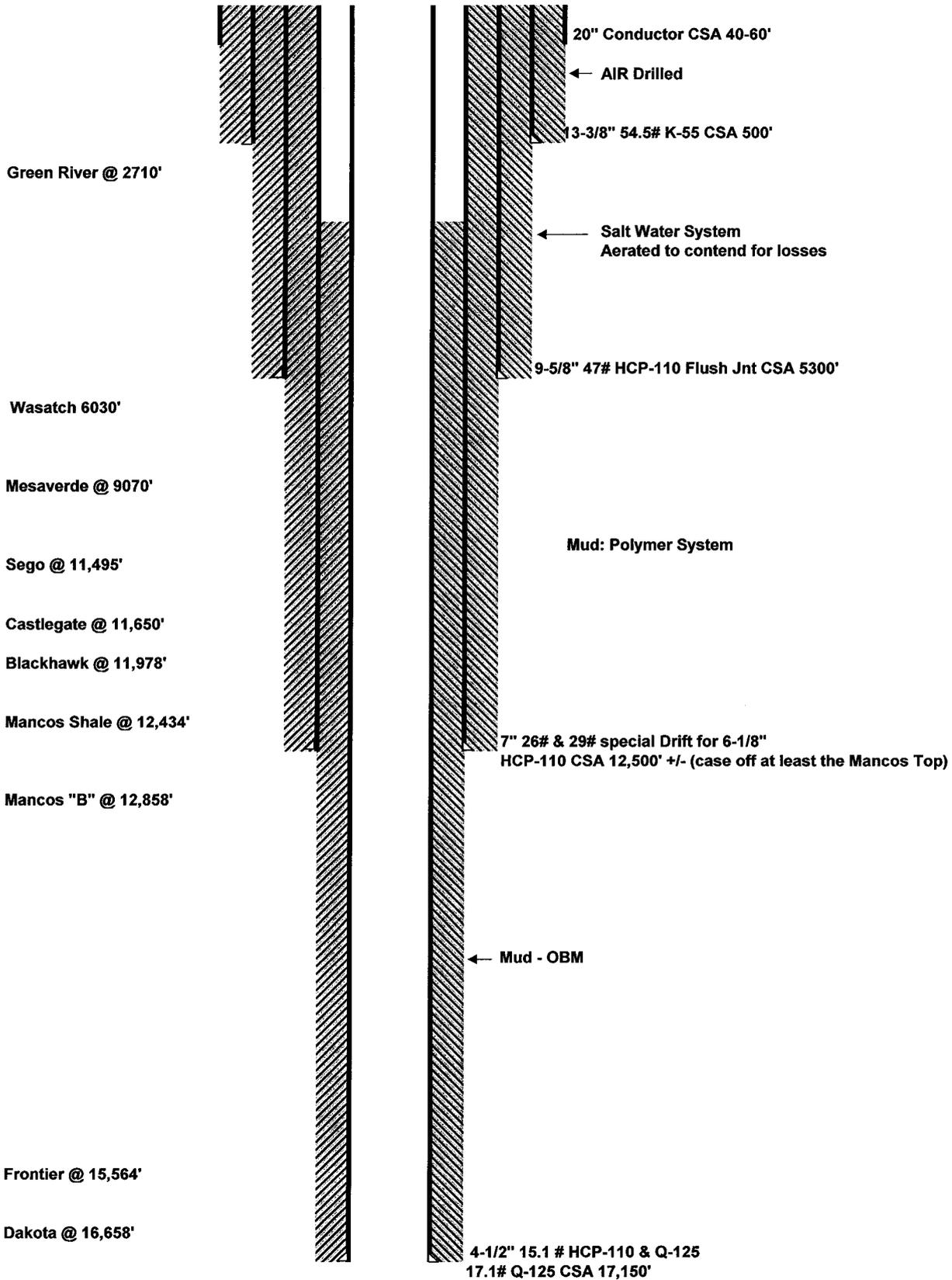
<b>Product</b>	<b>Function</b>	<b>Concentration</b>
<b>NewBar</b>	Weighting material	As needed
<b>OptiVis</b>	Organophilic Clay / Viscosifier	2-4 ppb
<b>OptiMul</b>	Primary Emulsifier	2.0 ppb
<b>OptiPlus</b>	Secondary Emulsifier	4.0 gal/bbl.
<b>OptiVis RM</b>	Low End Rheology Modifier	0.1-0.2 ppb
<b>Calcium Chloride Water</b>	Internal Phase	10.0%-20.0 % by volume
<b>Calcium Chloride</b>	Salinity/Activity	300,000 - 350,000 mg/l
<b>OptiG</b>	Fluid Loss control Additive	1.0-4.0 ppb
<b>Lime</b>	Alkalinity Additive	5 ppb
<b>NewCarb M</b>	Loss Circulation Material	10.0 ppb
<b>NewCarb F</b>	Loss Circulation Material	As required
<b>DynaFiber</b>	Loss Circulation Material	As required



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# WV 11AD-14-8-21



Form 3160-5  
(November 1994)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

5. Lease Serial No.

UTU-0807

6. If Indian, Allottee or Tribe Name

UTE INDIAN TRIBE

7. If Unit or CA/Agreement, Name and/or No.

WONSITS VALLEY UNIT

8. Well Name and No.

WV 11AD-14-8-21

9. API Well No.

43-047-38049

10. Field and Pool, or Exploratory Area

WONSITS VALLEY

11. County or Parish, State

UINTAH

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

QUESTAR EXPLORATION & PRODUCTION, CO. Contact: Jan Nelson

3a. Address

11002 E. 17500 S. VERNAL, UT 84078

3b. Phone No. (include area code)

435-781-4331

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2601' FSL 2611' FEL, NWSE, SECTION 14, T8S, R21E

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other TD CHANGE
	<input checked="" type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

QUESTAR EXPLORATION AND PRODUCTION COMPANY (QEP) REQUEST PERMISSION TO CHANGE THE TD FROM THE ORIGINALLY APPROVED 11,245' TESTING THE MESA VERDE TO 17,150' TO TEST THE DAKOTA.

ATTACHED IS A REVISED DRILLING PLAN. CEMENT, BOP DIAGRAM, DRILLING FLUIDS PROGRAM AND WELLBORE DIAGRAM.

FOR TECHNICAL QUESTIONS, PLEASE CONTACT JIM DAVIDSON, CHIEF DRILLING ENGINEER FOR QEP AT (303) 308-3090. COPY SENT TO OPERATOR

Date: 2-21-2008

Initials: KS

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Laura Bills

Title

Regulatory Affairs

Signature

*Laura Bills*

Date

February 14, 2008

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

*Bradley Hill*

Title

BRADLEY G. HILL  
ENVIRONMENTAL MANAGER

Date

02-19-08

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

Title 18 U.S.C. Section 1001, makes 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.

(Instructions on reverse)

Federal Approval of this  
Action is Necessary

RECEIVED  
FEB 14 2008  
DIV OF OIL, GAS & MINING

CONFIDENTIAL

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	2,710'
Wasatch	6,030'
Mesaverde	9,070'
Sego	11,495'
Castlegate	11,650'
Blackhawk	11,978'
Mancos Shale	12,434'
Mancos B	12,858'
Frontier	15,564'
Dakota Silt	16,456'
Dakota	16,658'
TD	17,150'

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>
Gas	Wasatch	6,030'
Gas	Mesaverde	9,070'
Gas	Blackhawk	11,978'
Gas	Mancos Shale	12,434'
Gas	Mancos B	12,858'
Gas	Dakota	16,658'

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.

## DRILLING PROGRAM

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 # A36125 (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 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. 13-5/8" 2000 psi annular BOP (schematic included) from surface casing seat to 9-5/8" casing point.
- B. 11" or 13-5/8" 10,000 psi double gate, 10,000 psi single gate, 10,000 psi annular BOP (schematic included) from 9-5/8" casing point to total depth. The choice of BOP stacks is based on the drilling contractor's availability.
- C. Functional test daily
- D. 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.
- E. 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 10M system and individual components shall be operable as designed.

### 4. Casing Design:

DRILLING PROGRAM

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Wt.	Grade	Thread	Cond.
26"	20"	sfc	40-60'	Steel	Cond.	None	Used
17-1/2"	13-3/8"	sfc	500'	54.5	K-55	STC	New
12-1/4"	9-5/8"	sfc	5300'	47	HCP-110	Flush Jnt **	New
8-1/2"	7"	sfc'	9,000'	26	HCP-110	LTC	New
8-1/2"	7"	9,000'	12,500'	29* SDrift	HCP-110	LTC	New
6-1/8"	4-1/2"	sfc	13,000'	15.1	P-110	LTC	New
6-1/8"	4-1/2"	13,000'	15,000'	15.1	Q-125	LTC	New
6-1/8"	4-1/2"	15,000'	17,150'	17.1	Q-125	LTC	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
13-3/8"	54.5 lb.	K-55	STC	1,130 psi	2,730 psi	547,000 lb.
9-5/8"	47 lb.	HCP-110	LTC	7,100 psi	9,440 psi	1,213,000 lb.
7"	29 lb.*	HCP-110	LTC	9,200 psi	11,220 psi	797,000 lb.
4-1/2"	15.1 lb.	P-110	LTC	14,350 psi***	14,420 psi	406,000 lb.
4-1/2"	15.1 lb.	Q-125	LTC	15,840 psi***	16,380 psi	438,000 lb.
4-1/2"	17.1 lb.	Q-125	LTC	19,010 psi***	18,180 psi	493,000 lb.

\* Special Drift

\*\* Flush Jnt - VAM SLIJ II

MINIMUM DESIGN FACTORS:

COLLAPSE: 1.125-1.3\*\*\*

BURST: 1.10

DRILLING PROGRAM

TENSION: 1.80

Area Fracture Gradient: 0.9 psi/foot  
Maximum anticipated mud weight: 15.4 ppg  
Maximum surface treating pressure: 12,500 psi

5. **Auxiliary Equipment**

- A. Kelly Cock – yes
- B. Float at the bit – yes
- 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  
If drilling with air the following will be used:
  - 1. The blooie line shall be at least 6” in diameter and extend at least 100’ from the well bore into the reserve/blooie pit.
  - 2. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500’).
  - 3. Compressor shall be tied directly to the blooie line through a manifold.
  - 4. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

Surface hole and the first intermediate hole section (12-1/4” hole) will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below the first intermediate casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is intended to use oil base mud in the production hole. Maximum anticipated mud weight is 15.4 ppg. The high mud density is required more for hole stability and not necessarily pore pressure.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow Show will be used from base of surface casing to TD.

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

DRILLING PROGRAM

6. **Testing, logging and coring program**

- A. Cores – none anticipated
- B. DST – none anticipated
- C. Logging – Mud logging – 4500' to TD  
GR-SP-Induction, Neutron Density, FMI
- D. Formation and Completion Interval: Mancos interval, final determination of completion will be made by analysis of logs.  
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

7. **Cementing Program**

**20" Conductor:**

Cement to surface with construction cement.

**13-3/8" Surface Casing: sfc – 500' (MD)**

**Slurry:** 0' – 500'. 610 sxs (731 cu ft) Premium cement + 0.25 lbs/sk Flocele + 2% CaCl<sub>2</sub>  
Slurry wt: 15.6 ppg, slurry yield: 1.20 ft<sup>3</sup>/sx, slurry volume: 17-1/2" hole + 100% excess.

**9-5/8" Intermediate Casing: sfc - 5300' (MD)**

**Lead Slurry:** 0' – 4,900'. 1409 sks (2072 cu. ft.) Foamed Lead 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset + 1.5 % Zonesealant 2000 (Foamer) Slurry wt: 14.3 ppg, (unfoamed) or 11.0 ppg. (foamed) Slurry yield: 1.47 ft<sup>3</sup>/sk (unfoamed), Slurry volume: 12-1/4" hole + 35 % excess.

**Tail Slurry:** 4,900' – 5,300'. 115 sks (30 bbls) Tail 50/50 Poz cement + 0.1 % FDP-C766-05 (Low Fluid Loss Control) + 5 #/sx Silicate Compacted + 20 % SSA-1 + 0.1 % Versaset Slurry wt: 14.3 ppg, Slurry yield: 1.47 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 35% excess.

**7" Intermediate Casing: sfc - 12,500' (MD)**

**Foamed Lead Slurry 2:** sfc' – 12,500'. 1246 sks (1982 cu ft) 50/50 Poz Premium + 20% SSA-1 + 3 % silicalite compacted + 3% Silicalite Compacted + 0.5% Halad 344 + 0.2% Halad 413 + 0.1% HR-12 + 0.7% Super CBL + 0.2% Suspend Slurry wt: 14.0 ppg., Slurry yield: 1.59 ft<sup>3</sup>/sk, Slurry volume: 8-1/2" hole + 25% excess.

## DRILLING PROGRAM

### **4-1/2" Production Casing: sfc - 17,150' (MD)**

**Lead/Tail Slurry:** 6,000 - 17,150'. 951 sks (1418 cu ft) Premium Cement + 17.5% SSA-1, + 4% Microbond HT, + 0.2% Halad 344 + 0.5% Halad 413, + 0.3% CFR-3, + 0.9% HR-12, + 0.2% Super CBL, + 0.2% Suspend HT, 17.5% SSA-2. Slurry wt: 16.2 ppg, Slurry yield: 1.49 ft<sup>3</sup>/sk, Slurry volume: 6-1/8" hole + 35% in open hole section.

\*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface on the intermediate string and 6,000' 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.

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

No H<sub>2</sub>S 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 10,000 psi to 11,000 psi based on pressure transient work on the GB 9D-27-8-21. Maximum anticipated bottom hole temperature is 300° - 310° F.

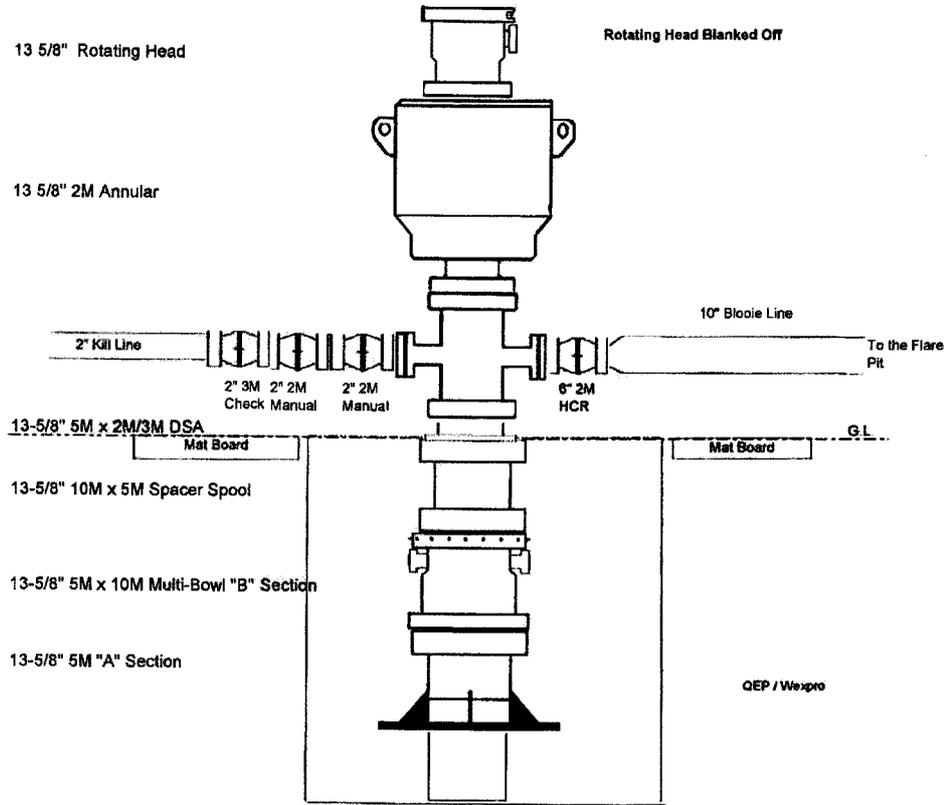
### **9. Reclamation for Oil Base Cuttings**

Prior to drilling out the 7" casing with oil base mud, the reserve pit will be separated at the dike with an additional liner to form 2 separate reserve pits.

Cuttings in the production hole (6-1/8" hole section) will be drilled with oil base mud. During the drilling operations, the cuttings will be collected and held in a steel 500 bbl collection tank on the drilling site. After the rig has completed drilling operations, the collected cuttings will be mixed and encapsulated with Solibond or an equivalent process in one of the reserve pits. The encapsulated cuttings will be left on site in the reclaimed reserve pit. The other reserve pit will dry out from water base cuttings and this pit will be reclaimed as well using conventional methods. Please review the attached Solibond process and proposal.

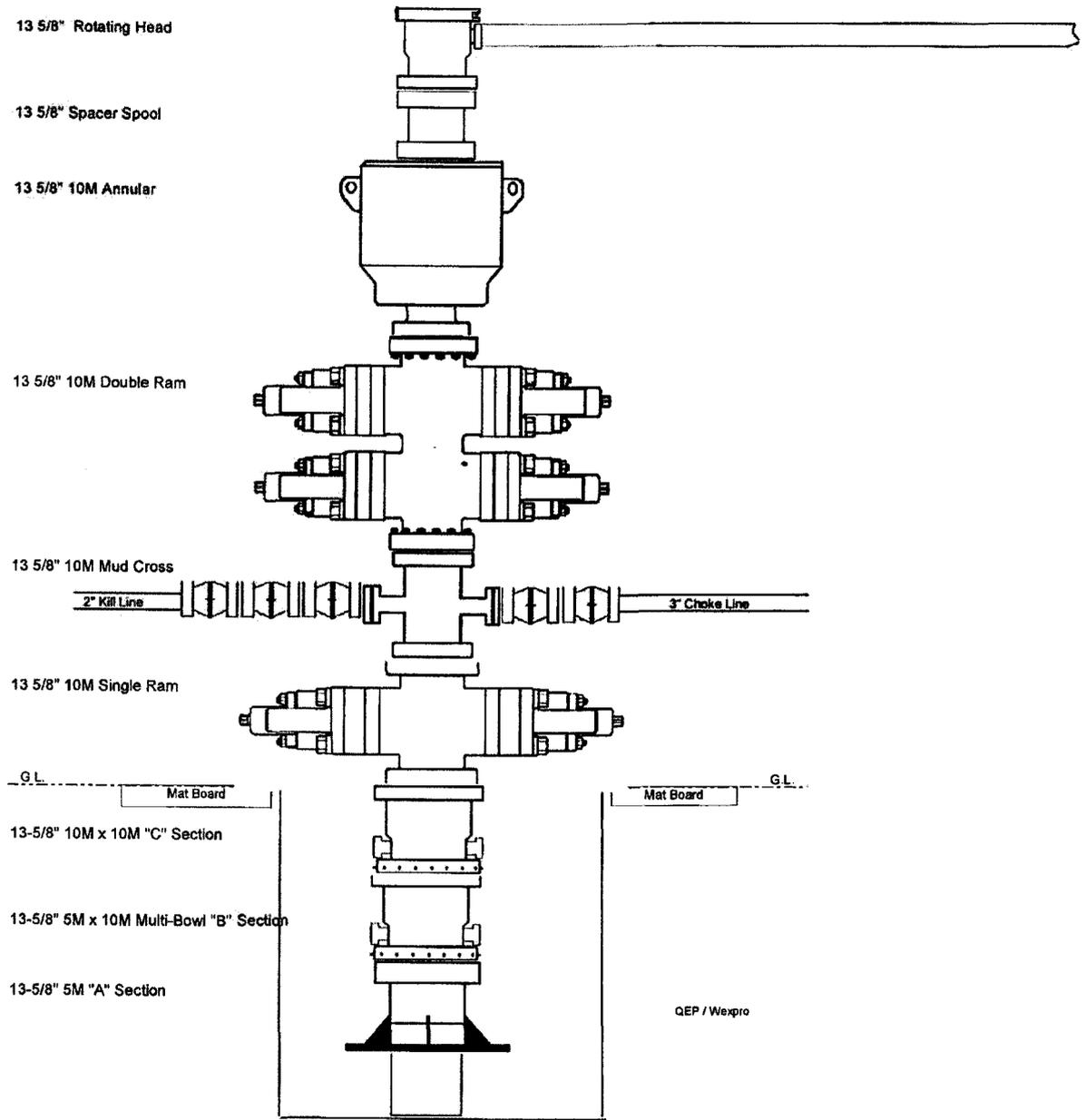
ONSHORE OIL & GAS ORLDR NO. 1  
Questar Exploration & Production Co.  
WV 11AD-14-8-21

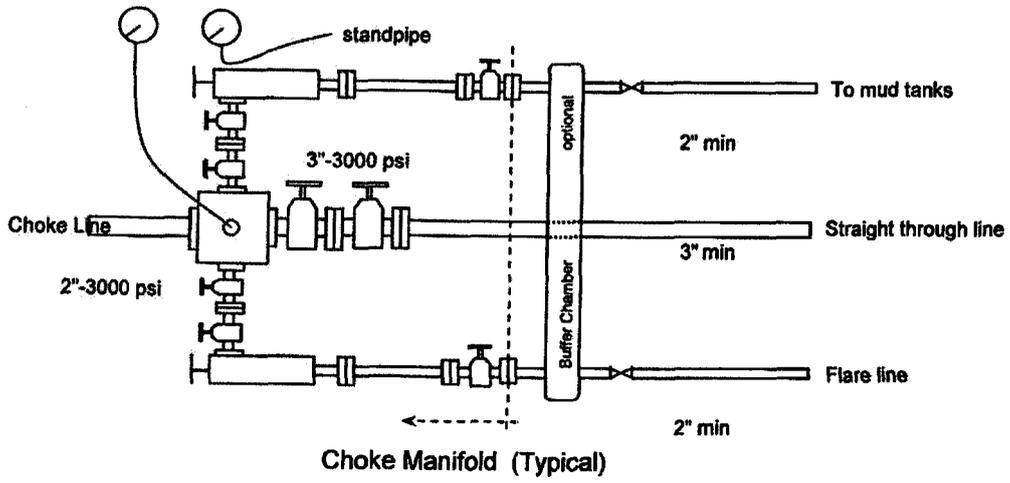
### DRILLING PROGRAM



ONSHORE OIL & GAS ORDER NO. 1  
Questar Exploration & Production Co.  
WV 11AD-14-8-21

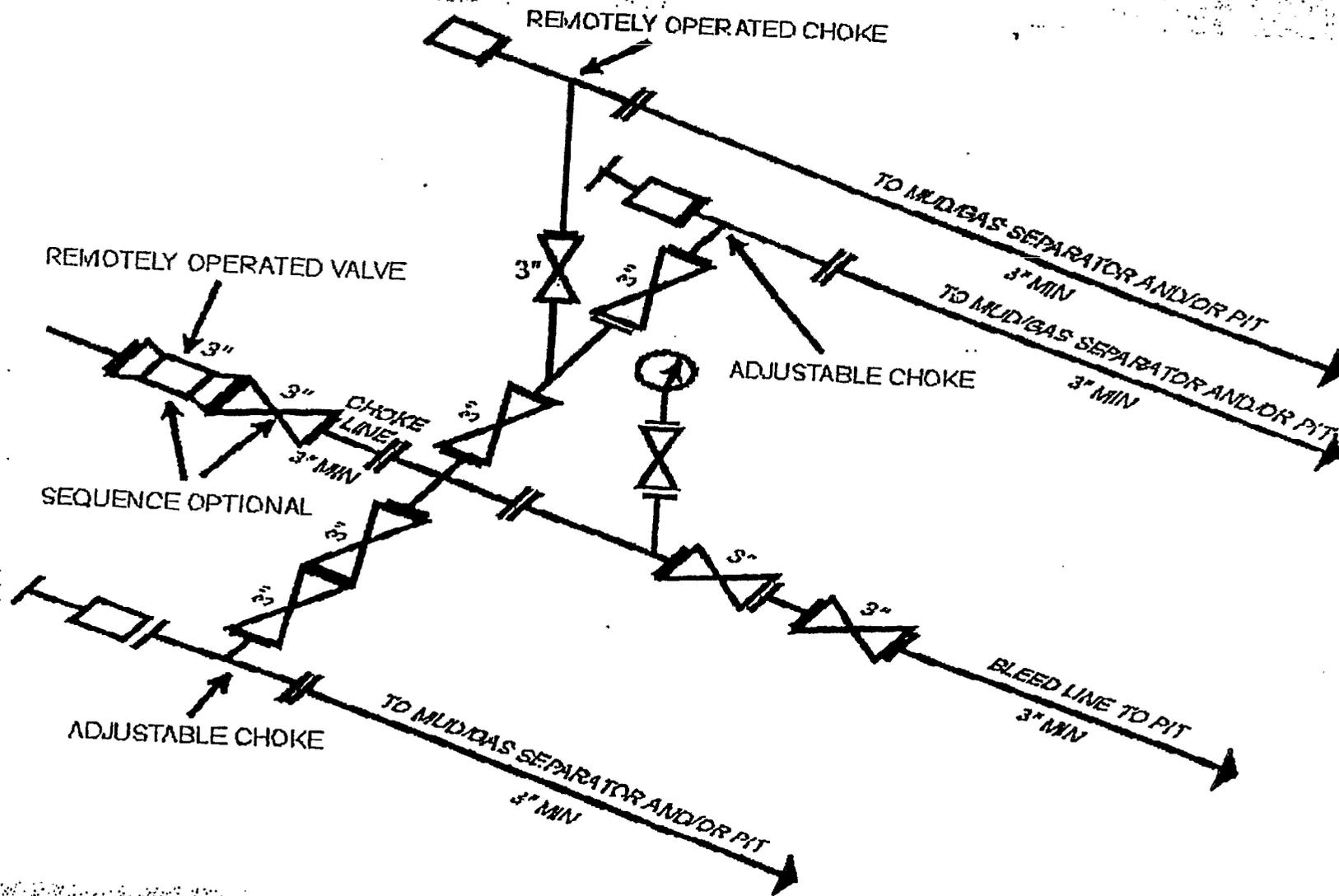
### DRILLING PROGRAM





Choke Manifold (Typical)

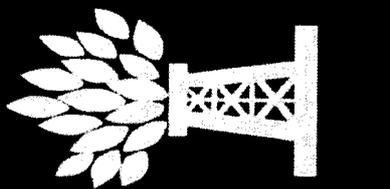
Attachment I. Diagrams of Choke Manifold Equipment



I-4 10M and 15M Choke Manifold Equipment -- Configuration of chokes may vary

[54 FR 39528, Sept. 27, 1989]

Last Updated March 25, 1997 by John Broderick



**NEWPARK**  
D R I L L I N G F L U I D S , L L C

**Questar**  
**Exploration &**  
**Production Company**

**WV 11AD-14-8-21**

**Sec 14-T8S-R21E**  
**Uintah County, Utah**

***Drilling Fluids Program***

410 17<sup>th</sup> Street, Suite 460 Denver, CO 80202  
(303) 623-2205 (720) 904-7970 Fax



## Newpark Drilling Fluids, LP

410 17<sup>th</sup> Street, Suite 460

■ Denver, Colorado 80202

■ (303) 623-2205

■ FAX (720) 904-7970

January 18, 2008

Mr. Jim Davidson  
Chief Drilling Engineer  
Questar Exploration & Production  
1331 17th Street, Suite 800  
Denver, Colorado 80202

RE: WV 11AD-14-8-21  
Sec 14-T8S-R21E  
Uintah Co, Utah

Mr. Davidson:

Newpark Drilling Fluids, LP is pleased to present the enclosed revised recommended drilling fluids program for the WV 11AD-14-8-21 well to be drilled in Uintah County, Utah. This program is for drilling with Aerated Saltwater in the 1st intermediate to 6000 ft, a polymer fluid system in the 2nd intermediate interval to 12,300 ft, then to T.D. at 16,875 ft with OBM.

The Surface Interval will be pre-set at a depth of 500 ft.

For the 1st intermediate Interval, an aerated saltwater drilling fluid is planned.

Brine kill pills may be needed for trips, logs, and casing operations, depending on pressure encountered while drilling. Trona water flows in this area may require a mud weight of 9.5-9.8 ppg to control. Required mud weight at interval T.D. at 5,300' is expected to be in the 8.8-9.0 ppg range.

In the 2nd intermediate interval, drill out with fresh water or mud-up before drilling out, as hole conditions dictate. When a mud-up is needed, mud-up to a NewPHPA/Polymer system. Mud weight in this interval is expected to be in the 11.2-11.4 ppg range at the 12,500 ft liner interval T.D.

In the Production interval, displace to a 12.0-12.5 ppg OptiDrill OBM system. Maintain fluid density as low as possible to increase penetration rates and reduce the possibility of lost circulation. Use high weight pills for well control during; trips, logs, and casing operations. Mud weight at T.D. is expected to be at +/-15.5 ppg.

The projected drilling time for this project is 65-70 days with an estimated material and engineering cost of \$500,000.00 assuming no unusual delays or problems are encountered. The estimate is based on minimal losses and a 15.0 ppg mud weight at TD. Costs will increase dramatically if severe losses are encountered.

All sack material and bulk barite will be furnished from our Grand Junction, Colorado facility, with OBM supplied from Newpark's Boulder, WY facility.

If you have any questions following your review of this proposal, please call.

Regards,

Estes Ward  
Operations Manager  
Newpark Drilling Fluids, LP

# Project Summary

**Questar**  
**Exploration & Production**  
**WV 11AD-14-8-21**  
**Sec 23-T8S-R21E**  
**Uintah, County Utah**

Depth (ft)	Formations	Interval Comments	Mud Weight (ppg)	Mud Properties
500'	Uinta Surface T.D.	Hole size: 17 1/2" / Casing: 13 3/8"  AIR DRILLED	NA	NA
2,710'  5,030' 5,300'	Green River Mahogeny  Wasatch 1st Intermediate T.D.	<b>Aerated Salt Water</b> Hole size: 11.0" / Casing: 9 5/8" Flush Joint  Drill out with saltwater aerating as needed to maintain circulation. When water is encountered reduce air as needed to control the flow. Pump pre-hydrated NewGel or Flowzan /SaltGelsweeps for increased hole cleaning and for any tight hole and/or torque. For trips, spot heavy brine if needed for trona flow, and at intermediate T.D. check hole conditions and spot high viscosity mud if needed. If hole conditions dictate a mud-up, base the system on the chloride content of the fluid.  Mud weight required at T.D. is expected to be in the 8.8-9.0 ppg range	9.5-10.0        9.5-10.0	Vis (sec/qt): Water PV (cp): NA YP (#s/100ft <sup>2</sup> ): NA FL (ml/30 min): NC  LGS %: < 1% pH: 10.5-10.8 Cl (mg/l): 150-200K
9,070'  11,495'  11,650' 11,978' 12,434' 12,500' +/-	Mesa Verde  Sego Bucktongue  Castlegate Blackhawk Mancos Shale 2nd Intermediate T.D.	<b>NewPHPA/Polymer</b> Hole size: 8.5" / Liner: 7"  Mud up as hole conditions dictate to a NewPHPA/ Polymer system. Maintain properties as outlined increasing the PHPA concentration to 1 ppb. Lost circulation may be a problem in this interval. If lost circulation is encountered, pump LCM pills as needed. If LCM pills will not control losses, by-pass the shakers and increase the LCM concentration in the system as needed. If severe lost circulation is encountered, consider a DynaPlug squeeze. Hole instability may be encountered in the Mesa Verde. Monitor torque, pump pressure, connection fill, and trip conditions for indications of hole instability and consider adding Asphalt if hole conditions dictate.	8.8  10.0  11.0  11.2  11.2	Vis (sec/qt): 40-45 PV (cp) : 12-20 YP (#s/100ft <sup>2</sup> ) : 10-12 FL (ml/30 min) : 6-8  LGS %: 3-5 pH: 10.0-10.5 Cl (mg/l): 11-15K PHPA: 1.0 ppb
12,858'  15,564' 16,658'  17,150'	Mancos B  Frontier equiv. Dakota Silt Dakota  Total Depth	<b>OptiDrill OBM</b> Hole size: 6-1/8" / Casing: 4-1/2"  Drill out with the OptiDrill system, treating cement contamination as needed with OptiWet to prevent shaker blinding. Maintain hole cleaning during high ROP's with high viscosity sweeps. Use a 1:1 ratio of OptiVis RM and OptiVis. CO2 in the gas stream while drilling under balanced will require additional Lime, emulsifiers and wetting agent.  Maintain mud weight as needed for well control. Spot high weight ECD pills for trips, logs, and casing operations.	11.2        15.5	PV (cp): 15-25 YP (lbs/100ft <sup>2</sup> ): 8-10 HPHT (mls/30 min.): <20 O/W : 80:20 - 85:15 ES: 500+ Lime: 2-4 ppb LGS %: < 6



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# Project Summary

Questar  
Exploration & Production  
WV 11AD-14-8-21  
Sec 23-T8S-R21E  
Uintah, County Utah

## DRILLING FLUID PROPERTIES

### Surface Hole: Air Drilled

Hole Size (in)	TVD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	Total Solids (%)
17 1/2"	0-500'	NA	NA	NA	NA	NA

### 1st Intermediate Hole: Aerated Saltwater

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	Chloride Mg/l (x1000)	LGS Solids (%)
11"	500'-5,300'	9.5-10.0	NA	NA	NA	150-200	< 1%

### 2nd Intermediate Interval: NewPHPA/Polymer

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	API Fluid Loss (ml/30min)	pH	LGS Solids (%)
8 1/2"	5,300'-8,000'	8.5-8.8	6-12	6-10	8-10	10.0-11.0	< 1%
8 1/2"	8,000'-12,500'	11.2-11.4	12-18	12-15	6-8	10.0-11.0	3-6

### Production Interval: OptiDrill OBM

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	O/W Ratio (%)	HPHT Fluid Loss (ml/30min)	CaCl (mg/l) X 10,000	Electrical Stability (mv)	LGS Solids (%)
6-1/8"	12,500'-17,150'	15.0-15.5	20-30	8-10	85/15	12-15	250-350	500 +	3-6

- Drilling fluid properties are guidelines only.
- Mud weights for guidelines only, allow hole conditions to dictate actual mud weights.
- Hole conditions should be closely monitored and product mix adjusted accordingly.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 480  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

**1st Intermediate Interval**  
**11" Hole (500' - 5,300')**

**Questar**  
**Exploration & Production**  
WY IIAD-14-8-21  
Sec 23-T8S-R21E  
**Uintah, County Utah**

<b>1st Intermediate Interval Drilling Fluid Properties</b>									
<b>Depth Interval (TVD)</b>	<b>Mud Weight (ppg)</b>	<b>Viscosity (sec/qt)</b>	<b>Plastic Viscosity (cp)</b>	<b>Yield Point (lb/100ft<sup>2</sup>)</b>	<b>pH</b>	<b>API Fluid Loss (ml/30min)</b>	<b>Hardness (Mg/l)</b>	<b>Low Gravity Solids</b>	<b>Chlorides (Mg/l (x1000))</b>
500'-5,300'+/-	9.5-10.0	NA	NA	NA	8.0-10.0	NA	NA	<1.0	150-200

- Drill out with Saltwater maintaining chlorides as needed for fluid weight. Aerate the fluid as needed to maintain circulation.
- If a water flow is encountered, balance air and fluid weight as needed to maintain circulation
- Pump pre-hydrated NewGel and/or Flowzan/SaltGel sweeps for increased hole cleaning, along with LCM sweeps for seepage (Paper LCM while drilling with water)
- If water flows are encountered, spot heavy brine pills for trips, logs and casing operations.
- If hole conditions dictate a mud-up, system used will depend on chloride concentration of the fluid.
- Offset information indicates the 1st major loss zone to be at +/- 3600 ft.
- Shallow gas/overpressure was encountered on some offsets in the area at 3,700-4,000'. A 9.5-9.9 ppg fluid was needed to control pressure.

<b>Challenges:</b>	<b>Strategies:</b>
Gravel/Unconsolidated formation	If encountered, pump sweeps of pre-hydrated NewGel with a viscosity of 150 -300 sec/qt.
Water Flows (Trona)	If water flows become excessive, control hydrostatic as needed with air additions and fluid density.
Lost Circulation	While drilling with water, pump LCM sweeps consisting of paper. If drilling with mud, pump mixed LCM pills in the 20-30% LCM range.
Hole Cleaning	Pump sweeps on a regular basis and for any indications of insufficient hole cleaning. Circulate and pump sweeps before connections and for any anticipated down time.
Increase ROP with PDC Bits	Pump 20-40 bbl. Sweeps with NewEase 203, New100N, DynaDet, and SAPP. (FlexDrill Sweeps)
Hole Instability/Sloughing Shale	Consider a mud-up and Asphalt additions.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# 1st Intermediate Interval

11" Hole (500' - 5,300')

Questar  
Exploration & Production  
WY 11AD-14-8-21  
Sec 23-T8S-R21E  
Uintah, County Utah

---

---

## Offset Data:

- Wells in this area have encountered major losses at +/- 3600 ft.
- Gravel/unconsolidated formation has been encountered at 1380 ft.
- Gas/overpressure has been encountered at 3,700'-4,000'.

## Fluid Recommendations:

- Drill out cement, float collar and new formation. Test the integrity of the casing seat and squeeze if necessary.
- Drill out with Saltwater, aerating as needed to maintain circulation.
- If water is encountered, control flow with reduced air and fluid density.
- If a Trona Water flow is encountered additions of **Lime** and/or **Calcium Chloride** should be used to adjust alkalinities as needed.
- The use of a premix tank is highly recommended. Pre-Hydrate **NewGel** for use as sweeps and for viscosity when a mud up is needed. Fill premix tank with fresh water. Treat out hardness with **SodaAsh** as needed. Add 0.25-0.5 ppb **Caustic Soda** for a 10.0-10.5 pH. Begin additions of 20-25 ppb **NewGel** allow sufficient circulating time for maximum hydration. Add 1.0-2.0 ppb **CFL II**. Then mix additional **NewGel** (30-40 ppb total) or a 120+ funnel viscosity. The pre-hydrated bentonite can be pumped from the premix to the pill tank and pumped downhole for sweeps or can be added slowly to the **Saltwater** for viscosity and rheology control.
- If penetration rates slow sweeps with **New 100N**, **NewEase 203**, **SAPP**, and **DynaDet** should be considered. (1% **New 100N**, 1% **NewEase 203**, 0.5-0.75 ppb **SAPP**, 0.2 % **DynaDet**). "**Flex Sweeps**"
- For trips, an increase in mud weight may be necessary to kill water flows. 9.8-10.0 ppg brine should be considered for this operation.
- Seepage and/or lost circulation may become a problem. For seepage while drilling with water, pump 20-30 bbl pills containing Paper LCM.
- If losses become severe, consider a mud up and LCM sweeps of **Cedar Fiber** and **FiberSeal** should be pumped and incorporated into the system as needed. If losses continue, increase coarse LCM in active system to 15-20%. If losses continue the use of a **DynaPlug** Squeeze is strongly recommended.
- At TD increase funnel viscosity for logs and casing operations as hole conditions dictate. Suggest funnel viscosity be increased to 45-50 sec/qt, before logging operations be attempted.
- At 5,300' ( intermediate T.D.) short trip, check hole conditions. If hole conditions dictate, add pre-hydrated **New-Gel** from the premix tank to the active system to increase funnel viscosity to 45-50 sec/qt and spot in the open hole for logs and casing operations

**DRILL STRING PACK-OFF:** Rapid penetration rate during fast drilling often deteriorates to pack-off, a situation which can lead to lost circulation and/or stuck pipe. Pack-off is typically self-induced by exceeding the maximum rate of penetration for a given annular flow rate. The solution to this is to control the penetration rate to a level that the pumps can adequately clean the hole while maintaining rheological properties in line with existing hydraulic parameters.

**SOLIDS CONTROL:** It is of the utmost importance that the shale shakers and flow line cleaners be equipped with the finest screens possible, and yet handle the flow rate. The desander and desilter units should be evaluated periodically and serviced to maximize performance.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

**2nd Intermediate Interval**  
**8 1/2" Hole (5,300' - 12,500')**

**Questar**  
**Exploration & Production**  
**WY 11AD-14-8-21**  
**Sec 23-T8S-R21E**  
**Utah, County Utah**

<b>2nd Intermediate Interval Drilling Fluid Properties</b>								
<b>Depth Interval (TVD)</b>	<b>Mud Weight (ppg)</b>	<b>Viscosity (sec/qt)</b>	<b>Plastic Viscosity (cp)</b>	<b>Yield Point (lb/100ft<sup>2</sup>)</b>	<b>pH</b>	<b>API Fluid Loss (ml/30min)</b>	<b>Hardness Mg/l)</b>	<b>Low Gravity Solids</b>
5,300'-8,000'	8.6-8.8	32-36	6-12	6-10	10.0-11.0	8-10	100+	4-6
8,000'-12,500'	11.2-11.4	45-50	10-18	12-14	10.0-11.0	6-8	100+	4-6

- Drill out with water and or mud as hole conditions dictate. After mud-up , allow the system to revert to a fresh water polymer system.
- As mud weight is increased, seepage losses can become severe. Treat with LCM pills as needed. If pill treatments will not contain the losses at reasonable levels, by-pass the shakers, retaining the pills and allowing the LCM concentration to increase as needed.
- Hole instability can occur in the Mesa Verde in this area. If encountered, consider adding Asphalt, building to a 4-6 ppb concentration.
- High pressure may be encountered in the Castlegate/Blackhawk. Monitor closely for increased pressure while drilling and use caution on trips to minimize possible swabbing.
- Mud weight at Liner Interval T.D. is expected to be in the 11.2-11.4 ppg range.

<b>Challenges:</b>	<b>Strategies:</b>
Hole Instability/Sloughing Shale	Consider 4-6 ppb Asphalt
Increase in Formation pressure	Monitor well conditions and increase density as needed with <b>NewBar</b> as needed.
Seepage/Lost Circulation	As mud weight is increased (10.0ppg +) seepage and losses may become a problem. For seepage pump 50 bbl sweeps with 5-10 ppb <b>DynaFiber</b> and 10-20 ppb <b>NewCarb</b> as needed. For partial or total losses pump sweeps with 10-15 ppb <b>FiberSeal</b> and <b>Cedar Fiber</b> . Severity of losses will determine size and quantity of LCM added. If losses are not controlled with sweeps consider 10-15% LCM in active system. For severe losses the use of a <b>DynaPlug</b> squeeze should be considered.
Differential Sticking	Maintain mud weight as low as possible. Control Low Gravity Solids below 6%, and control fluid loss at 8-10 ml/30 min.
Increase ROP with PDC Bits	Pump 20-40 bbl. Sweeps with <b>NewEase 203</b> , <b>New100N</b> , <b>DynaDet</b> , and <b>SAPP</b> . ( <b>FlexDrill Sweeps</b> )



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

## 2nd Intermediate Interval 8 1/2" Hole (5,300'-12,500')

Questar  
Exploration & Production  
WY 11AD-14-8-21  
Sec 23-T8S-R21E  
Uintah, County Utah

---

---

### Offset Data:

Wells in this area have experienced losses as mud weights are increased to control formation pressure. LCM sweeps are strongly recommended for this reason. Mud weights should be kept as low as practical but increases to 11.2 ppg may be required by 2nd Intermediate TD at 12,500'.

- Loss zones on offset wells were at 9200 ft and 9500 ft.

### Fluid Recommendations:

- Drill out cement, float collar and new formation with the system from the previous interval. Test the integrity of the casing seat and squeeze if necessary.
- Drill out with water and or mud. If drilling out with water consider a mud up by +/- 7500 ft or as hole conditions dictate.
- Begin additions of 0.5-1.0 ppb **NewPHPA** and maintain throughout the interval.
- Maintain viscosity with PreHydrated **NewGel** until chlorides have dropped below 5000-7000 mg/l. After chlorides have dropped **NewGel** will not need to be pre-hydrated and can be added directly to the system.
- Begin additions of **NewPHPA**. Concentration of **NewPHPA** should be maintained at 0.5-1.0 ppb throughout the interval. As mud weight increases additions of **PHPA** should be switched from **NewPHPA DLMW** to the shorter chain **NewPHPA DSL**.
- If hole conditions dictate, consider 4-6 ppb Asphalt.
- If penetration rates slow sweeps with **New 100N**, **NewEase 203**, **SAPP**, and **DynaDet** should be considered. (1% **New 100N**, 1% **NewEase 203**, 0.5-0.75 ppb **SAPP**, 0.2 % **DynaDet**). "**Flex Sweeps**"
- Increase mud weight as needed to control formation pressures as needed. Mud weights should be maintained as low as practical to reduce chance of losses and differential sticking. Increase mud weight as needed with **NewBar**.
- As density increases additions of **NewEdge** and/or **DrillThin** should be added for rheology control.
- As bottom hole temperatures increase and additional fluid loss control is desired supplement the **NewPAC** with **DynaPlex** for fluid loss control Lower API filtrate to 6-8 cc's with additions of **NewPAC** and **DynaPlex**.
- As mud weight is increased seepage and/or lost circulation may become a problem. For seepage pump 20-30 bbl pills containing a combination of **NewCarb** and **DynaFiber** mixed at a 2:1 ratio. If partial or total returns are encountered, LCM sweeps with a varied size distribution including **Cedar Fiber** and **Fiber Seal**, **PhenoSeal** and other assorted sizes should be considered and incorporated into the system as needed. 20-25% LCM in the active system may be required. The type, size and quantity of LCM used will depend on the severity of losses. If losses are severe a **DynaPlug** squeeze should be considered.
- At TD increase funnel viscosity for logs and casing operations as hole conditions dictate. Suggest funnel viscosity be increased to 50-55 sec/qt, before logging or casing operations be attempted.
- While circulating casing it is recommended to reduce Yield Points for cementing operations.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

**Production Interval**  
**6 1/8" Hole (12,500'-17,150')**

**Questar**  
**Exploration & Production**  
**WV 11AD-14-8-21**  
**Sec 23-T8S-R21E**  
**Uintah, County Utah**

<b>Production Interval Drilling Fluid Properties</b>									
<b>Depth Interval (TVD)</b>	<b>Mud Weight (ppg)</b>	<b>Plastic Viscosity (cp)</b>	<b>Yield Point (lb/100ft<sup>2</sup>)</b>	<b>O/W Ratio %</b>	<b>HTHP Fluid Loss (ml/30min)</b>	<b>Excess Lime (PPB)</b>	<b>Electrical Stability (MV)</b>	<b>Low Gravity Solids</b>	<b>CaCl Mg/l Water</b>
12,500'-17,150'	15.0-15.5	25-35	8-10	85:15	12-15	2-4	500+	< 6	300K

**Drilling Fluid Recommendations: (12,500'-17,150')**

- Displace to a OptiDrill OBM after finishing the casing job at 12,500'.
- After displacement, maintain the OptiDrill system within the parameters outlined above.
- Offsets in the area have encountered high rates of seepage in this interval. If indications of seepage are observed, sweeps of NewCarb C, Dynafiber C & M, NewSeal, and CyberSeal are recommended. Mixing ratios are recommended to be at 5:1 NewCarb M to Dynafiber , NewSeal, and CyberSeal. If losses continue to be a problem, consider trying different sizes and combinations until seepage is slowed.
- Maintain rheology low to reduce ECD values and reduce surge and swab during connections and trips.
- Drill as underbalanced as possible to help prevent losses and increase penetration rates.
- For pressure control, spot high weight pills with an equivalent mud weight to drilling ECD's. On trips in, stage these pills out and divert to storage for further use. High weight pills in excess of the drilling ECD should be avoided due to possible lost circulation.

<b>Challenges</b>	<b>Strategies</b>
Displacement	<ul style="list-style-type: none"> <li>• Have 1200-1300 bbls of OBM volume on location along with a pump capable of keeping up with displacement rates.</li> <li>• Pump a 10-20 bbl viscosified OBM spacer ahead of the OptiDrill (enough for 500 ft + separation)</li> <li>• A steady pump rate for either turbulent or plug flow should be used. Reciprocate and rotate to assist in minimizing channeling.</li> <li>• Do not shut down once displacement commences.</li> <li>• Should any contamination occur, isolate the contaminated fluid for reconditioning.</li> </ul>
Seepage/lost Circulation.	Pump LCM sweeps when seepage and/or losses are indicated. Sweeps should be a mixture of , NewCarb, Dynafiber, NewSeal, and CyberSeal. If lost returns are encountered, consider a Diaseal M or cross linked polymer squeeze.
Maintaining Oil wet solids	For every 1.0 ppg mud weight increase, mix 0.02 gal/bbl OptiWet
Pressure control	<ul style="list-style-type: none"> <li>• Spot weighted pills calculated to give a bottom hole pressure equal to drilling ECD.</li> <li>• Do not exceed drilling bottom hole pressure with the ECD pill. Lost circulation has been a problem on offset wells.</li> <li>• Stage weighted pills out of the hole and recover for future use.</li> </ul>



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 480  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

# Production Interval

6 1/8" Hole (12,500'-17,150')

Questar  
Exploration & Production  
WV 11AD-14-8-21  
Sec 23-T8S-R21E  
Uintah, County Utah

---

---

## Maintenance Procedure:

**HPHT** - Maintain HPHT values within programmed parameters. Additions of **OptiMul** and **OptiPlus**, at recommended concentrations should maintain the HTHP at recommended levels. If hole conditions indicate a need for lower HPHT values, **Opti G** at 2-4 ppb is recommended.

**Electrical Stability**— Electrical stability should be used as a guide not as an absolute in determining maintenance requirements. Actual values are not critical but should be observed for trends or changes. Decreases in electrical stability should be noted along with other mud properties to determine treatments. To increase electrical stability add emulsifiers and wetting agents **OptiMul** and **OptiPlus** or decrease water content.

**Oil/Water Ratio** - Maintain the oil/water ratio in the 90:10-80:20 range depending on mud weight and condition.. Higher water content will decrease the amount of **OptiVis** needed for rheology.

**Mud weight** - Maintain minimum fluid densities with solids equipment. Monitor hole conditions and all drilling parameters closely for indications of increases in formation pressures and adjust fluid densities accordingly. Drilling with a minimum amount of overbalance will reduce the possibility of losing returns and/or of differentially sticking the drill string. Mud weight on offset wells was in the 15.0-15.5 ppg range at T.D.

**Rheology** - Maintain solids as low as possible. Increase rheology as needed for hole cleaning with a combination of **OptiVis (Bentone 910)** and **Opti Vis RM** or **Opti Vis PS** and water content.

**Lime** - Maintain the excess Lime at 2-3 ppb excess.

**Hole cleaning** - Calculate rheology requirements based on ROP, pump rates and hole conditions. Adjust as needed .

**Mud losses downhole**—Monitor ECD's with Hy-Calc, maintaining the lowest values possible. If losses are encountered; sweeps containing **NewCarb**, **DynaFiber**, **Opti-G**, and **NewSeal** should be circulated to aid in the prevention of losses. If seepage losses continue and/or become severe, consider spotting a pill with **Magma Fiber (Fine & Regular)** and the above formulation. Keep the hole full at all times, and avoid excessive swabbing and/or surge actions when tripping.

**Solids Control** - Maintain low gravity solids at 4-6 % by volume. The high performance shakers should be equipped with the finest mesh screens that will handle the circulating volume and not cut barite out.

**Water Contamination**— Keep all water sources off the mud pits. If contamination occurs, treat with emulsifiers and Calcium Chloride as needed.



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 480  
Denver, CO. 80202  
(303) 623-2205 FAX (720) 904-7970

**Production Interval**  
**6 1/8" Hole (12,500'-17,150')**

**Questar**  
**Exploration & Production**  
WV 11AD-14-8-21  
**Sec 23-T8S-R21E**  
**Uintah, County Utah**

**Recommended materials for relaxed filtrate OptiDrill system :**  
**( 85:15 Oil/Water Ratio)**

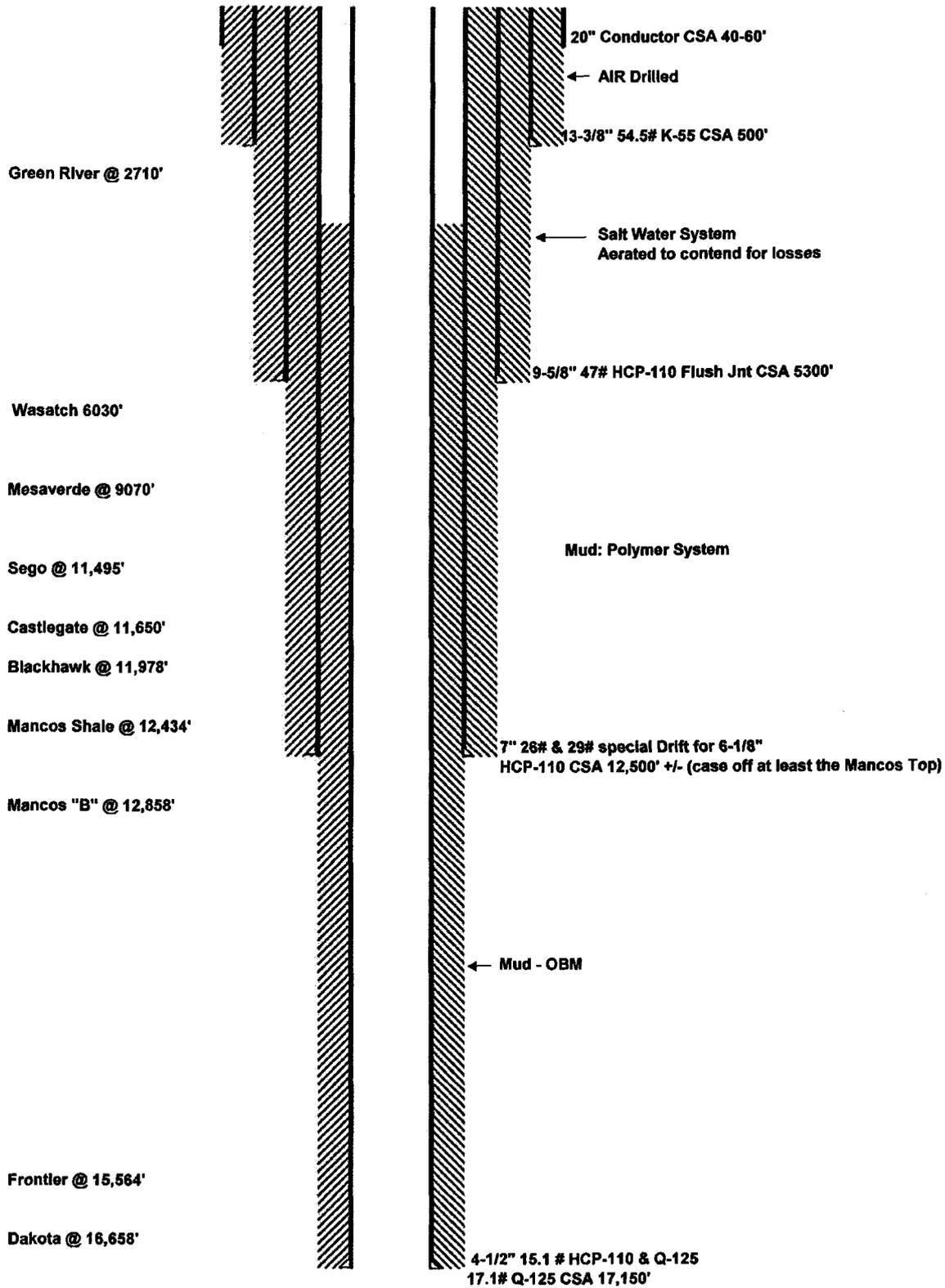
<b>Product</b>	<b>Function</b>	<b>Concentration</b>
<b>NewBar</b>	Weighting material	As needed
<b>OptiVis</b>	Organophilic Clay / Viscosifier	2-4 ppb
<b>OptiMul</b>	Primary Emulsifier	2.0 ppb
<b>OptiPlus</b>	Secondary Emulsifier	4.0 gal/bbl.
<b>OptiVis RM</b>	Low End Rheology Modifier	0.1-0.2 ppb
<b>Calcium Chloride Water</b>	Internal Phase	10.0%-20.0 % by volume
<b>Calcium Chloride</b>	Salinity/Activity	300,000 - 350,000 mg/l
<b>OptiG</b>	Fluid Loss control Additive	1.0-4.0 ppb
<b>Lime</b>	Alkalinity Additive	5 ppb
<b>NewCarb M</b>	Loss Circulation Material	10.0 ppb
<b>NewCarb F</b>	Loss Circulation Material	As required
<b>DynaFiber</b>	Loss Circulation Material	As required



**Newpark Drilling Fluids, LP**

410 17th Street, Suite 460  
 Denver, CO. 80202  
 (303) 623-2205 FAX (720) 904-7970

**WV 11AD-14-8-21**



43-047-38049

14 8s 21e.

RECEIVED

APR 01 2008

Questar E &amp; P

DIV. OF OIL, GAS &amp; MINING Page 1 of 10

~~CONFIDENTIAL~~

## Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release: Group:  
 Spud Date: 2/5/2008  
 End: 2/28/2008  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
2/5/2008	06:00 - 14:00	8.00	DRL	9	DRLSUR	DRILL F/ SURFACE TO td @ 540"
	14:00 - 06:00	16.00	CMT	2	CSGSUR	RUN SURFACE PIPE LANDED @ 502' & CEMENT SAME
2/21/2008	06:00 - 18:00	12.00			RDMO	CONTINUE TO RIG DOWN SET DERRICK & A LEGS ON GROUND DOG HOUSE FLOOR PLATES, DRAWWORKS, ROTARY TABLE, PARTS HOUSE, HOPPER HOUSE PUMP SHED ENGINE SHED PULLED POWER CALBES 40 % RIG DOWN & 20 % MOVED TO NEW LOCATION
	18:00 - 06:00	12.00			RDMO	WAIT ON DAY LIGHT
2/22/2008	06:00 - 18:00	12.00			MIRU	RIG DOWN REST OF SUB & SPEADERS SCR HOUSE MOTORS, MUD PITS, MUD PUMPS WATER TANKS, CHOKE HOUSE, RIG MATS RIG DOWN 100% 80% RIG EQUIPMENT HAULED TO NEW LOCATION MOVE LIVING QUARTERS TOMMORROW MORNING ( WELDERS WORK ON DERICK ) LAY OUT LINER ON NEW LOCATION READY FOR RIG MATS
	18:00 - 06:00	12.00			MIRU	WAIT ON DAY LIGHT
2/23/2008	06:00 - 18:00	12.00			MIRU	CONTINUE WORK ON DERRICK A LEGS & MOVE THE REST OF RIG QUIPMENT TO NEW LOCATION MOVE RIG OFFICE'S SPOT SAME RIG UP BACK YARD & SUBS & RIG FLOOR DRAWWORKS & MUD TANKS MUD PUMPS
	18:00 - 06:00	12.00			MIRU	WAIT ON DAY LIGHT
2/24/2008	06:00 - 18:00	12.00			MIRU	CONTINUE TO RIG UP PARTS HOUSE, MUD HOPPER HOUSE, SET AIR HEATER, TOP DRIVE HOUSE, SET ENGINES & FUEL TANK, WATER TANKS, BOILER HOUSE, BOP LIFT HOIST, SET KOOMEY UNIT HOUSE & SUIT CASE, BAR BULK UP RIGHT TANKS, HOOK UP POWER CABLES 75 % RIGGED UP & 95% EQUIPMENT HAULED TO NEW LOCATION ( DERRICK IS ON OLD LOCATION ) PLAN IS TO MOVE DERRICK TOMMORROW
	18:00 - 06:00	12.00			MIRU	WAIT ON DAY LIGHT
2/25/2008	06:00 - 18:00	12.00			MIRU	RIG UP POWER CABLES, STEAM HOSES & LINES, AIR LINES, DISASSEMBLY DERRICK ON OLD LOCATION, MOVE DERRICK FROM OLD LOCATION 2ND LOAD GOT STUCK ON OLD LEASE ROAD TOOK THREE HOURS TO GET THE TRUCK UN STUCK & REPAIR THE ROAD CONTINUE TO MOVE THE REST OF THE DERRICK TO NEW LOCATION LAST SECTION OF THE DERRICK ARRIVED ON NEW LOCATION @ 1635 HRS, PIN ALL DERRICK SECTIONS & CROSS SECTION WAS UNABLE TO LIFT DERRICK TO PIN TO DERRICK DUE TO DAY LIGHT
	18:00 - 06:00	12.00			MIRU	WAIT ON DAY LIGHT
2/26/2008	06:00 - 18:00	12.00			MIRU	BRIDLE UP, START MOTORS CHECK DRAWWORKS ROTATION, RIG UP ALL LIGHTS ON MUD TANKS MAKE UP KELLY HOSE TO DERRICK, HOOKED UP FLOW LINE, DIG DITCHES, RIG UP YELLOW DOG PUMP IN RESERVE PIT RIGGED SHAKER SLIDES & FILL UP RESERVE PIT WITH WATER 85 % RIGGED UP RAISE DERRICK IN THE MORNING @ DAY LIGHT & PICK UP TOP DRIVE & EQUIPMENT
	18:00 - 06:00	12.00			MIRU	WAIT ON DAY LIGHT
2/27/2008	06:00 - 18:00	12.00			MIRU	RIG UP PIN DERRICK TO FLOOR, PIN BOARD ON DERRICK, STRING UP BLOCKS, RAISE DERRICK 90 % RIGGED UP
	18:00 - 06:00	12.00			MIRU	WAIT ON DAY LIGHT
2/28/2008	06:00 - 18:00	12.00	LOC	4	MIRU	RIG UP- PIN OFF DRILLER SIDE A-LEG TO DERRICK, BOPE HYDRALICS-FILL UP LINE, CHOKE LINES TO FLARE BOX, STAND PIPE, CATA-LEVERED CAT-WALK, UNBRIDLE, HANG TOP DRIVE TRACK, FILL BOILER AND BUILD A HEAD OF STEAM

### Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
2/28/2008	18:00 - 06:00	12.00	OTH		MIRU	WAIT ON DAY LIGHTS
2/29/2008	06:00 - 18:00	12.00	LOC	4	MIRU	PICK UP TOP DRIVE, TURN STEAM AROUND RIG-RIG UP STEM HEATERS ON FLOOR, (FIX LEAKS AND LINES), PUT SCREENS ON SHAKERS, RE WELD FLOW LINE, GEL MUD TANK GATES, WORK ON YELLOW DOG--READY FOR MORNING, TURN WATER AROUND RIG, PUT WIND WALLS UP ON FLOOR, (DIDN'T BREAK TOUR-WILL DO TODAY)
3/1/2008	18:00 - 06:00	12.00	OTH	4	MIRU	WAIT ON DAY LIGHTS
	06:00 - 18:00	12.00	LOC		MIRU	FINISH RIGGING UP TOP DRIVE, FILL MUD TANKS- CIRCULATE GUN LINES, PUT IN DRIP PAN HAD TO WRESTLE IT UNDER (SHOULD HAVE PUT IN ON RIG MOVE), CALLED AND NOTIFIED BLM OF PRESSURE TESTING AND DRILLING OUT OVER PHONE TALKED TO RAY ARNOLD @ 8:05 AM
	18:00 - 22:00	4.00	OTH		MIRU	CUT AND SLIP DRILLING LINE, FINISH RIGGING UP FLOOR (PIPE SPINNERS, WIRE LINE MACHINE, MOUSE HOLE (LOST A PIECE THAT MOTOR SET'S ON RIG MOVE HAD TO HAVE WELDER BUILD A NEW BASE), HAD TO EXTEND SLIDES FROM SHAKERS TO RESERVE PIT, RUN PUMPS-THROUGH POP OFFS, INSTALL ROTATING MOUSE HOLE, PICK UP TOOLS AND TRASH AROUND RIG, WORK ON LIGHTING TO KOOMY HOUSE
3/2/2008	22:00 - 02:30	4.50	BOP	1	DRLIN1	TORQUE BOPE WITH B.C.QUICK TEST
	02:30 - 06:00	3.50	BOP	2	DRLIN1	PRESSURE TEST BOPE-- 5,000 TEST(HIGH) AND 250 (LOW) DOUBLE BALL VALVE, AND FLOOR VALVES TESTED GOOD-CURRENTLY TESTING STACK --BLM NOT ON LOCATION- WAS NOTIFIED
	06:00 - 09:00	3.00	BOP	2	DRLIN1	TEST BOP 5,000 PSI HIGH AND 250 LOW, TOP & BOTTOM PIPE RAMS, BLIND RAMS, CHOKE MANIFOLD, HCR, TEST CASING 1500 30 MIN, PULL TEST PLUG AND RIG DOWN TESTERS, DID FUNCTION TEST ON KOOMY CHECK OUT GOOD
	09:00 - 10:00	1.00	OTH		DRLIN1	INSTALL WEAR BUSHING
	10:00 - 11:30	1.50	OTH		DRLIN1	LAY OUT AND STRAP BHA
	11:30 - 15:00	3.50	TRP	1	DRLIN1	PICK UP BHA-HAD TO FIX A VALVE IN SUCTION TANK WHILE PICKING UP BHA(VALVE DIDN'T HAVE ANY RUBBER IN IT)
	15:00 - 18:00	3.00	RIG	2	DRLIN1	AFTER PICKING UP BHA (WEIGHT HANGING COULD SEE THAT WE NEEDED TO LEVEL DERRICK), LOOKED GOOD WITH NO WEIGHT
	18:00 - 21:30	3.50	RIG	2	DRLIN1	WORK ON TOP DRIVE RAIL, WHILE WORKING ON RAIL PUSHER FOUND THAT A SAFETY SWITCH WASN'T RIGGED UP RIGHT, WENT TO FIX IT AND LOST ALL POWER TO TOP DRIVE PANEL-TESCO HAND
	21:30 - 23:30	2.00	DRL	4	DRLIN1	DRILL FLOAT 458', CEMENT, SHOE 500' (CEMENT LOOKED GREAT) AND 10' OF NEW FORMATION TO 550'
	23:30 - 00:00	0.50	EQT	2	DRLIN1	PERFORM FIT 60 PSI WITH 8.5 MW = EQUIV. 10.6 MW
00:00 - 03:00	3.00	TRP	10	DRLIN1	TRIP OUT OF HOLE TO PICK UP SPEED DRILL BIT, CHANGE BIT AND TRIP BACK IN, (BLEW DOWN KELLY HOSE)	
03:00 - 06:00	3.00	DRL	1	DRLIN1	DRILL FROM 550 TO 698 (ROP 49) WOB 5-10, DHRPM 250, MW 8.5, DRILLING GOOD- RATTLING DERRICK SPEED UP AND SLOW DOWN RPM TO STOP BEST IS @70 RPM	
3/3/2008	06:00 - 10:30	4.50	DRL	1	DRLIN1	DRILL FROM 698 TO 977(ROP 62' HR) WOB 5-10, DHRPM 250, MW 8.6
	10:30 - 11:00	0.50	SUR	1	DRLIN1	SURVEY @ 900, .4 DEG, 128.2 AZ
	11:00 - 15:00	4.00	DRL	1	DRLIN1	DRILL FROM 977 TO 1,156 (ROP 44.75' HR) WOB 5-15, DHRPM 230-260 WORK DIFFERNT PERAMETERS TO SEE IF GET TO DRILL BETTER-

### Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
3/3/2008	15:00 - 16:00	1.00	RIG	1	DRLIN1	SERVICE TOP DRIVE AND RIG, BLOCKS, DRAWWORKS, SWIVEL
	16:00 - 01:30	9.50	DRL	1	DRLIN1	DRILL FROM 1,156 TO 1430 (ROP 28.8) WOB 10-15, DHRPM 250, MW 8.7,
	01:30 - 02:00	0.50	DRL	1	DRLIN1	SURVEY @ 1360 .7 DEG, AZ 95.1
	02:00 - 04:00	2.00	DRL	1	DRLIN1	DRILL FROM 1,130 TO 1471 (ROP 20.5) WOB 10-15, DHRPM 250, MW 8.7,
	04:00 - 06:00	2.00	RIG	2	DRLIN1	TOOH 5 STANDS AND FIX STAND PIPE LEAK (UNOIN IN SUB O-RING)
3/4/2008	06:00 - 07:00	1.00	RIG	2	DRLIN1	FINISH CHANGING O-RING IN STAND PIPE AND TIGHTEN CLAMP
	07:00 - 15:00	8.00	DRL	1	DRLIN1	DRILL FROM 1471 TO 1705 (ROP 29.25' HR) WOB 10-17 ANY MORE THAN 17 WOULD STALL OUT ROT., DHRPM 230-260, 756 GAL MIN,BG GAS 45 UNITS, CONN GAS 350 UNITS
	15:00 - 15:30	0.50	RIG	1	DRLIN1	SERVICE RIG TOP DRIVE SWIVEL
	15:30 - 19:00	3.50	DRL	1	DRLIN1	DRILL FROM 1705 TO 1799 (ROP 26.8' HR) WORKING DIFFERNT PERRAMETERS TO GET TO DRILL
	19:00 - 19:30	0.50	OTH		DRLIN1	INSTALL ROTATING HEAD RUBBER
	19:30 - 06:00	10.50	DRL	1	DRLIN1	DRILL FROM 1799 TO 2,085 (ROP 27.3' HR) WOB 10-15, DHRPM 250, 756 GAL MIN, BG GAS 31, CON GAS 380 DRILLING STEADY, DRILL FROM 2085-2215 RUNNING DIFFERENT PERAMETERS TO GET TO DRILL-WITH HIGHER WOB AND GAL.S , RATTLES EVERYTHING IN THE DERRICK AND FLEXING TORQUE TRACK, FIX HYDRALIC HOSE BROKE FITTING FROM BAILS SWINGING FROM TORQUE & REINSTALL ROTATING HEAD RUBBER-CAME THROUGH TABLE WHEN ATTEMPTING TO MAKE CONNECTION RAT NESTED DRILLING LINE WHEN PICKING UP PIPE OUT OF MOUSE HOLE AFTER MAKING MOUSE HOLE CONNECTION, (STRAIGHTEN OUT LINE)
3/5/2008	06:00 - 12:00	6.00	DRL	1	DRLIN1	DRILL FROM 2085-2215 RUNNING DIFFERENT PERAMETERS TO GET TO DRILL-WITH HIGHER WOB AND GAL.S , RATTLES EVERYTHING IN THE DERRICK AND FLEXING TORQUE TRACK, FIX HYDRALIC HOSE BROKE FITTING FROM BAILS SWINGING FROM TORQUE & REINSTALL ROTATING HEAD RUBBER-CAME THROUGH TABLE WHEN ATTEMPTING TO MAKE CONNECTION RAT NESTED DRILLING LINE WHEN PICKING UP PIPE OUT OF MOUSE HOLE AFTER MAKING MOUSE HOLE CONNECTION, (STRAIGHTEN OUT LINE)
	12:00 - 12:30	0.50	RIG	2	DRLIN1	WORK ON DISCHARGE SCREEN ON #2 PUMP (LEAKING), AND CHANGE OUT POP OFF ON #2 PUMP
	12:30 - 13:00	0.50	OTH		DRLIN1	DRILL PIPE STOPPED WHILE DRILLING(PRESSURE DIDN'T SPIKE-WASN'T MUD MOTOR), TOP DRIVE PANEL SYSTEM TEMP LIGHT CAME ON AT DRILLERS PANEL, BROKE OFF DOUBLE AND WORKED PIPE WHILE FIXXING PROBLEM--RESET ALL DEFAULTS AND CHANGED A REMOTE WIRE TO TOP DRIVE, AND CLEANED ALL CONNECTIONS-- WORKING GOOD AT PRESENT TIME(CHANGED SEAT IN #2 PUMP CENTER)
	13:00 - 13:30	0.50	RIG	2	DRLIN1	DRILL FROM 2215-2310 (ROP 31.7' HR)
	13:30 - 19:00	5.50	RIG	2	DRLIN1	SURVEY @ 2241 .4 DEG, AZ 228.8
3/6/2008	06:00 - 15:00	9.00	DRL	1	DRLIN1	DRILL FROM 2310-2446 (ROP 18.1' HR) WOB 14-18, DHRPM 261, MW 9.1, VIS 27, BG GAS 100 UNITS
	15:00 - 15:30	0.50	CIRC	1	DRLIN1	DRILL FROM 2446-2588
	15:30 - 18:30	3.00	TRP	10	DRLIN1	PUMP HI-VIS SWEEP AROUND
	18:30 - 19:00	0.50	TRP	1	DRLIN1	PUMP TRIP SLUG AND TRIP OUT OF HOLE
	19:00 - 20:00	1.00	RIG	1	DRLIN1	LAY DOWN 8" MUD MOTOR AND BIT
	20:00 - 20:30	0.50	TRP	1	DRLIN1	WORK ON COMPENSATOR ON TOP DRIVE AND LUBE DRAWWORKS ANDCLEAN RIG FLOOR
	20:30 - 23:00	2.50	TRP	10	DRLIN1	PICK UP 9 1/2" MUD MOTOR AND BIT
	23:00 - 23:30	0.50	REAM	1	DRLIN1	TRIP IN HOLE WITH NEW BIT AND MOTOR
	23:30 - 00:00	0.50	OTH		DRLIN1	SAFETY WAS AND REAM FROM 2,498 TO 2588 NO FILL
	00:00 - 00:30	0.50	RIG	2	DRLIN1	HAND DRILL PILOT HOLE
00:30 - 06:00	5.50	DRL	1	DRLIN1	WORK ON #2 POP OFF TWICE	
3/7/2008	06:00 - 06:00	24.00	DRL	1	DRLIN1	DRILL FROM 2,588 TO 2,685
					DRLIN1	DRILL FROM 2,685 TO 2985 (ROP 12.5' HR) WOB 5-28, DHRPM

**Operations Summary Report**

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
3/7/2008	06:00 - 06:00	24.00	DRL	1	DRLIN1	150-220, MW 9, VIS 30, WORKING ALL DIFFERNT PERAMETERS TO GET BIT TO DRILL -NO FLOW ON CONNECTIONS
3/8/2008	06:00 - 07:30	1.50	DRL	1	DRLIN1	DRILL FROM 2985 TO 2996 (ROP 7.3' HR) WOB 15-30, DHRPM 215, MW 8.9, VIS 29, PUMPING SWEEPS
	07:30 - 09:00	1.50	RIG	2	DRLIN1	BROKE SPRING IN #1 PUMP(DIDN'T HAVE ONE IN PARTS AND HAD TO GO TO BORROW ON FROM RIG 109)
	09:00 - 15:30	6.50	DRL	1	DRLIN1	DRILL FROM 2996 TO 3066 (ROP 10.7' HR) WOB 15-28, DHRPM 175-215, MW 9, VI 30 PUMPING SWEEPS EVERY HR.
	15:30 - 16:30	1.00	RIG	1	DRLIN1	SERVICE RIG, BLOCKS, SWIVEL, TOP DRIVE
	16:30 - 18:00	1.50	DRL	1	DRLIN1	DRILL FROM 3066 TO 3083 (ROP 11.3' HR)
	18:00 - 18:30	0.50	CIRC	1	DRLIN1	CIRCULATE HIGH VIS SWEEEP TO CLEAN HOLE FOR TRIP
	18:30 - 19:00	0.50	SUR	1	DRLIN1	DROP SURVEY @ 3033, 2.2 DEG, 201.2 AZ
	19:00 - 21:30	2.50	TRP	10	DRLIN1	TRIP OUT HOLE
	21:30 - 22:30	1.00	TRP	1	DRLIN1	LAY DOWN AND PICK UP MUD MOTOR
	22:30 - 01:30	3.00	TRP	10	DRLIN1	TRIP IN HOLE WITH NEW MOTOR AND BIT
	01:30 - 02:00	0.50	REAM	1	DRLIN1	WASH FROM 2972 TO 3083 3' FILL
	02:00 - 06:00	4.00	DRL	1	DRLIN1	DRILL FROM 3,083 TO 3,187 (ROP 26' HR) WOB 0-7, DHRPM 210, MW 9, BG GAS 124
3/9/2008	06:00 - 10:30	4.50	DRL	1	DRLIN1	DRILL FROM 3187 TO 3353 (ROP 36.8' HR) WOB 7, DHRPM 204, MW 9, VIS 28, BG GAS 427
	10:30 - 11:00	0.50	RIG	1	DRLIN1	SERVICE TOP DRIVE, DRAWWORKS, SWIVEL
	11:00 - 15:30	4.50	DRL	1	DRLIN1	DRILL FROM 3353 TO 3511(ROP 35.1' HR) WOB 5, DHRPM 205, MW9, VIS 28, BG GAS 449 (HAD 1/2" TRONA WATER FLOW)
	15:30 - 16:00	0.50	RIG	2	DRLIN1	REPAIR BROKEN SPRING IN #1 PUMP
	16:00 - 21:00	5.00	DRL	1	DRLIN1	DRILL FROM 3511 TO 3639 (ROP 25.6' HR) WOB 7, DHRPM 204, MW 9, VIS 28, BG 390, CONNECTION GAS 960 (STILL HAVE 1/2" TRONA WATER FLOW)
	21:00 - 21:30	0.50	SUR	1	DRLIN1	SURVEY @ 3570 2.1 DEG., 198.3 AZ.
	21:30 - 06:00	8.50	DRL	1	DRLIN1	DRILL FROM 3639 TO 3778 (ROP 16.4' HR) WOB 5-11, DHRPM 205, MW 9, VIS 28, BG GAS 278, TRONA WATER FLOW 1/2"
3/10/2008	06:00 - 15:30	9.50	DRL	1	DRLIN1	DRILL FROM 3778 TO 3925 (ROP 15.4' HR) WOB 7-15, DHRPM 210, MW 8.9, VIS 28, BG GAS 167 UNITS
	15:30 - 16:00	0.50	RIG	1	DRLIN1	SERVICE RIG TOPDRIVE, DRAWWORKS, SWIVEL
	16:00 - 17:00	1.00	DRL	1	DRLIN1	DRILL FROM 3925 TO 3940
	17:00 - 18:00	1.00	RIG	2	DRLIN1	REPAIR WASH VALVES AND SEATS
	18:00 - 19:00	1.00	CIRC	1	DRLIN1	TRIED TO GET TO DRILL (NO GO) CIRCULATE AND BUILD TRIP SLUG AND PUMP HIGH VIS SWEEP AROUND
	19:00 - 19:30	0.50	SUR	1	DRLIN1	DROP SURVEY
	19:30 - 22:30	3.00	TRP	10	DRLIN1	PUMP TRIP SLUG AND TRIP OUT HOLE TO CHANGE BIT (BIT 1 3/4" OUT OF GAUGE)
	22:30 - 23:30	1.00	TRP	1	DRLIN1	CHANGE OUT MOTORS (HUNTING .07) AND BIT
	23:30 - 02:00	2.50	TRP	10	DRLIN1	TRIP IN HOLE THE LAST 600' SLOW (LOOKING FOR UNDER GAUGE HOLE)- HAD SAND IN SAMPLES @ 3842 AND 3922 WHICH COULD HAVE DULLED BIT
	02:00 - 03:00	1.00	REAM	1	DRLIN1	WASH AND REAM FROM 3776 TO 3940 UNDER GAGE HOLE STARTED @ 3916
3/11/2008	03:00 - 06:00	3.00	DRL	1	DRLIN1	DRILL FROM 3940 TO 3995 (ROP 18.3' HR), WOB 5-12, DHRPM 138, MW 9, VIS 28, BG GAS 269,
	06:00 - 11:00	5.00	DRL	1	DRLIN1	DRILL FROM 3995 TO 4125 (ROP 26' HR) WOB 5-15, DHRPM 138, MW 8.9, VIS 28, BG GAS 333 (1/2" TRONA WATER ON CONNECTIONS)-HAD SOME SLIP STICK-
	11:00 - 11:30	0.50	RIG	1	DRLIN1	SERVICE DRAW TOOL AND ROTARTY

**Operations Summary Report**

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
3/11/2008	11:30 - 15:30	4.00	DRL	1	DRLIN1	DRILL FROM 4125 TO 4220 (ROP 23.7' HR) WOB 10-15, DHRPM 120-150, MW 9, VIS 28, BG GAS 380 (1/2" TRONA WATER FLOW)
	15:30 - 16:00	0.50	RIG	1	DRLIN1	SERVICE TOP DRIVE AND CROWN (FIX KELLY HOSE)
	16:00 - 06:00	14.00	DRL	1	DRLIN1	DRILL FROM 4220 TO 4507 (ROP 20.5) WOB 10-17, DHRPM 125, MW 8.9, VIS 27, BG GAS 236 (1/2" TRONA WATER ON CONNECTION)
3/12/2008	06:00 - 09:00	3.00	DRL	1	DRLIN1	DRILL FROM 4,507 TO 4,602--HAD SOME SLIP STICK ADJUSTED ROT. WOB TO STOP (ROP 31.6' HR) WOB 10-15, DHRPM 138, MW 9, VIS 28, BG GAS 232
	09:00 - 09:30	0.50	RIG	1	DRLIN1	RIG SERVICE TOP DRIVE, SWIVEL, BLOCKS
	09:30 - 20:30	11.00	DRL	1	DRLIN1	DRILL FROM 4,602 TO 4,820 (ROP 19.8' HR) WOB 10-15, 138, MW 8.9, VIS 29, BG GAS 321 HAD BOP DRILL ON CONNECTION-FUNCTION TESTED ANNULAR
	20:30 - 21:00	0.50	OTH		DRLIN1	WORK ON PASON TORQUE AND ROTORY (STILL NOT FIXED HAND DOING RESEARCH)
	21:00 - 00:00	3.00	DRL	1	DRLIN1	DRILL FROM 4,820 TO 4,883 (ROP 18' HR) STARTED MUDDING UP SYSTEM @ 4,800' FOR POSSIBLE WATER FLOOD AHEAD (PRESSURED UP ???)
3/13/2008	00:00 - 00:30	0.50	SUR	1	DRLIN1	SURVEY @ 4,808 1.8 DEG, 187.1 AZ
	00:30 - 06:00	5.50	DRL	1	DRLIN1	DRILL FROM 4,883 TO 5,000 (ROP 21.2' HR) WOB 10-15, MW 9.1, VIS 36, BG GAS 142
	06:00 - 11:00	5.00	DRL	1	DRLIN1	DRILL F/ 5000' TO 5,078' W/ NO LOSSES HAD SOME SLIP STICKING ADJUSTED WOB & ROTARY SPEED ( 78' @ 15.6' P/HR ) MUD WT. 9 VIS 29 DHRPM 135 BG GAS 220 UNITS
	11:00 - 11:30	0.50	RIG	1	DRLIN1	RIG SERVICE
	11:30 - 14:30	3.00	DRL	1	DRLIN1	DRILL F/ 5,078' TO 5,099' W/ NO LOSSES ROP SLOWED DOWN TO 7'P/HR. MUD WT 9 VIS 28
	14:30 - 15:30	1.00	CIRC	1	DRLIN1	CIR. OUT BIT BALLING SWEEP & FLOW CHECK -OK PUMP DRY PILL
	15:30 - 17:30	2.00	TRP	10	DRLIN1	TOOH
	17:30 - 19:30	2.00	RIG	2	DRLIN1	REPLACE HYDRAULIC HOSE @ DRILLER CONSOLE FOR BREAK OUT RIG TONGS & CHANGE OUT BREAK OUT CABLE ( DAMAGED )
	19:30 - 21:00	1.50	TRP	10	DRLIN1	TRIP OUT OF HOLE CHANGE OUT 12 1/4" BIT
	21:00 - 01:00	4.00	TRP	2	DRLIN1	TRIP IN HOLE W/ NO PROBLEMS
3/14/2008	01:00 - 06:00	5.00	DRL	1	DRLIN1	DRILL F/ 5,099' TO 5,175' ( 76' @ 15.2' P/HR. ) W/ NO LOSSES MUD WT. 9.1 PPG VIS 36
	06:00 - 06:30	0.50	RIG	1	DRLIN1	RIG SERVICE
	06:30 - 18:00	11.50	DRL	1	DRLIN1	DRILL F/ 5,175' TO 5,285' ( 110' @ 9.6' P/HR ) WOB 12/24 MUD WT 9.2 PPG VIS 32 W/ NO LOSSES BG GAS 210
	18:00 - 22:00	4.00	DRL	1	DRLIN1	DRILL F/ 5,285' TO TD @ 5,311' ( 26' @ 6' P/HR ) WOB 12/28 MUD WT 9.2 VIS 35
	22:00 - 02:00	4.00	TRP	10	DRLIN1	W/ NO LOSSES BG GAS 230 ROP SLOWED DOWN THE LAST TWO HOURS TO 2.2' P/HR.
3/15/2008	02:00 - 03:00	1.00	TRP	1	DRLIN1	TRIP OUT OF HOLE DUE TO SLOW ROP
	03:00 - 06:00	3.00	TRP	2	DRLIN1	BREAK OUT BIT & LAY DOWN MOTOR PICK UP NEW BIT & BAKER MOTOR
	06:00 - 08:30	2.50	DRL	1	DRLIN1	TRIP IN HOLE
	08:30 - 09:30	1.00	REAM	1	DRLIN1	TRIP IN HOLE W/ NEW BIT & MOTOR
	09:30 - 15:00	5.50	DRL	1	DRLIN1	WASH & REAM F/ 5068' TO BOTTOM @ 5311' NO FILL
	15:00 - 15:30	0.50	RIG	1	DRLIN1	DRILL F/ 5311' TO 5355' ( 44' @ 8' P/HR ) WOB 10- 18 MUD WT 9.3 PPG VIS 35 BG GAS 145 W/ NO LOSSES
	15:30 - 17:00	1.50	DRL	1	DRLIN1	SERVICE RIG & TOP DRIVE
					DRLIN1	DRILL F/ 5355' TO TD @ 5368' ( 13' @ 6.5' P/HR ) WOB 15-19 MUD

### Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
3/15/2008	15:30 - 17:00	1.50	DRL	1	DRLIN1	WT 9.3 PPG VIS 34 BG GAS 155 W/ NO LOSSES
	17:00 - 18:00	1.00	CIRC	1	DRLIN1	CIR. HOLE CLEAN & CONDITION FOR WIPER TRIP
	18:00 - 19:00	1.00	TRP	14	DRLIN1	WIPER TRIP F/ TD @ 5368' TO 4848' W/ NO PROBLEMS
	19:00 - 21:00	2.00	CIRC	1	DRLIN1	CIR. & CONDITION HOLE
	21:00 - 00:00	3.00	TRP	2	DRLIN1	DROP SURVEY & PUMP SLUG & POH TO BHA
	00:00 - 01:00	1.00	TRP	1	DRLIN1	L/D 8" DRILL COLLAR'S & MONEL W/ MOTOR
	01:00 - 02:30	1.50	TRP	2	DRLIN1	PULL ROTATING HEAD ASSEMBLY
	02:30 - 04:00	1.50	TRP	2	DRLIN1	ATTEMPT TO PULL WEAR BUSHING NOT MOVING CALLED CAMERON & WAIT ON CAMERON ENG. COMING F/ VERNAL
3/16/2008	04:00 - 06:00	2.00	CSG	1	DRLIN1	WHILE WAITING ON CAMERON ENG. RIG UP CASING EQUIPMENT
	06:00 - 07:00	1.00	CSG	1	DRLIN1	RIG UP ROCKY MOUNTAIN CASING EQUIPMENT
3/17/2008	07:00 - 10:30	3.50	FISH	6	DRLIN1	WORK PIPE ATT.TO PULL WEAR BUSHING WHILE WAITING ON SURFACE JARS
	10:30 - 11:30	1.00	CSG	1	DRLIN1	CONTINUE TO RIG UP CASING EQUIPMENT & STABBING BOARD
	11:30 - 15:00	3.50	FISH	3	DRLIN1	PICK UP & MAKE UP SURFACE DRILLING JARS ( JAR WEAR BUSHING FREE W/ 135K OVER PULL & JAR FIRING )
	15:00 - 01:30	10.50	CSG	2	DRLIN1	HOLD SAFETY MEETING W/ CASING & FILL UP TOOL CREWS PICK UP 9 5/8 CASING FILL EVERY JT WHILE RUNNING IN HOLE BREAK CIR. EVERY 1200'
	01:30 - 03:30	2.00	CIRC	1	DRLIN1	CIR. & CONDITION RIG DOWN CASING EQUIPMENT
	03:30 - 06:00	2.50	CMT	1	DRLIN1	INSTALL PACK OFF BUSHING & RIG UP HAL.
	06:00 - 14:30	8.50	CMT	2	CSGIN1	R/UP HAL. & HOLD S/MEETING P/TEST LINES TO 8000 PSI PUMP 40 BBLs SPACER @ 5 BBLs/MIN. PUMP SCAVENGER CEMENT 30 BBLs, PUMP 1st LEAD CEMENT 482.3 BBLs & PUMP 2ND LEAD CEMENT 126.5 BBLs, PUMP TAIL CEMENT 81.7 BBLs DROP TOP PLUG FLUSH LINES & DISPL. 386.2 BBLs W/ 850 PSI BUMP PLUG @ 1500 PSI HELD 15 MIN OK BLEED OFF PSI NO BACK FLOW
	14:30 - 15:30	1.00	CMT	1	CSGIN1	RIG DOWN CEMENTERS
	15:30 - 17:30	2.00	CMT	1	CSGIN1	LAY DOWN LANDING JT & CLEAN RIG FLOOR
	17:30 - 23:00	5.50	BOP	2	DRLIN2	PICK UP BOPS TESTING EQUIPMENT & M/UP P/TEST BOPS W/ 250 LOW TEST & 10000 HIGH TEST ( HYDRIL WAS TEST LOW 250 & HIGH 3500 )
3/18/2008	23:00 - 00:30	1.50	TRP	2	DRLIN2	INSTALL WEAR BUSHING & ROTATE HEAD ASEMBLY
	00:30 - 03:00	2.50	TRP	1	DRLIN2	PICK UP & M/UP 8.5 BHA
	03:00 - 05:30	2.50	TRP	2	DRLIN2	TRIP IN HOLE TO LAND COLLAR @ 5258'
	05:30 - 06:00	0.50	DRL	4	DRLIN2	DRILL OUT CASING EQUIPMENT
	06:00 - 08:30	2.50	DRL	4	DRLIN2	TAG FLOAT COLLAR @ 5255' DRILL OUT F/C & SHOE
	08:30 - 09:00	0.50	DRL	1	DRLIN2	DRILL F/ SHOE TO 5378' TOTAL 10' NEW HOLE
	09:00 - 10:00	1.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP & CONDUCT A FIT TO 13.5 PPG EQUIVALENT
	10:00 - 12:00	2.00	DRL	1	DRLIN2	DRILL F/ 5378' TO 5455' ( 77' @ 38.5' P/HR ) WOB 5-8 MUD WT 9.3 VIS 35 DHRPM 65 W/ NO LOSSES
	12:00 - 12:30	0.50	RIG	1	DRLIN2	SERVICE RIG
	12:30 - 18:00	5.50	DRL	1	DRLIN2	DRILL F/ 5455' TO 5650' ( 195' @ 35.5' P/HR ) WOB 7-11 MUD WT 9.3 VIS 35 DH RPM 65 W/ NO LOSSES
3/19/2008	18:00 - 18:30	0.50	CIRC	1	DRLIN2	CIR. & REPAIR MUD PUMPS
	18:30 - 06:00	11.50			DRLIN2	DRILL F/ 5650' TO 5850' ( 200' @ 17.5' P/HR ) WOB 12-20 MUD WT 9.3 VIS 39 DH RPM 65 W/ NO LOSSES
	06:00 - 14:30	8.50	DRL	1	DRLIN2	DRILL F/ 5,850' TO 6,027' ( 177' @ 21' P/HR ) WOB 15-20 MUD WT 9.3 PPG VIS 37 DH RPM 65 W/ NO LOSSES HAD SOME SLIP STICKING ADJUSTED ROT. SPEED
	14:30 - 15:00	0.50	RIG	1	DRLIN2	SERVICE RIG
	15:00 - 18:00	3.00	DRL	1	DRLIN2	DRILL F/ 6,027' TO 6,085' ( 58' @ 19.3 P/HR ) WOB 17-20 MUD WT

### Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
3/19/2008	15:00 - 18:00	3.00	DRL	1	DRLIN2	9.3 VIS 35 DH RPM 65/75 W/ NO LOSSES DUE ( TOP OF WASATCH 5,995' )
	18:00 - 00:30	6.50	DRL	1	DRLIN2	DRILL F/ 6,085' TO 6218 ( 133' @ 20.5 P/HR. ) WOB 17-20 MUD WT 9.3 VIS 38
	00:30 - 02:00	1.50	CIRC	1	DRLIN2	CIR. BOTTOMS UP & WIRE LINE SURVEY
	02:00 - 06:00	4.00	DRL	1	DRLIN2	DRILL F/ 6,218 TO 6,282' ( 64' @ 16' P/HR ) WOB 17-20 MUD WT 9.3 VIS 36 DH RPM 65 W/ NO LOSSES
3/20/2008	06:00 - 12:30	6.50	DRL	1	DRLIN2	DRILL F/ 6,282' TO 6,410' ( 128' @ 19.8' P/HR ) WOB 14-20 MUD WT 9.4 PPG VIS 35 DH RPM 65 W/ NO LOSSES
	12:30 - 13:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	13:00 - 18:00	5.00	DRL	1	DRLIN2	DRILL F/ 6,410' TO 6,507' ( 97' @ 19.6' P/HR ) WOB 15-20 MUD WT 9.4 PPG VIS 36 DH RPM 65 W/ NO LOSSES
3/21/2008	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL F/ 6,507' TO 6,760' ( 253' @ 21' P/HR ) WOB 14-18 MUD WT 9.4 PPG VIS 34 DH RPM 65 S/ NO LOSSES
	06:00 - 17:30	11.50	DRL	1	DRLIN2	DRILL F/ 6,760' TO 6,989' ( 229' @ 20' P/HR ) WOB 15-21 MUD WT 9.4 PPG VIS 39 DH RPM 65 W/ NO LOSSES
	17:30 - 18:00	0.50	RIG	1	DRLIN2	RIG SERVICE
3/22/2008	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL 6,989' TO 7,269' ( 280' @ 23.5' P/HR ) WOB 15-22 MUD WT 9.4 VIS 38 DH RPM 65 W/ NO LOSSES
	06:00 - 14:30	8.50	DRL	1	DRLIN2	DRILL F/ 7,269' TO 7,555' ( 286' @ 33.6' P/HR ) WOB 15-25 MUD WT 9.3 PPG VIS 41 DH RPM 65 W/ 18 BBLs P/HR LOSSES
	14:30 - 15:00	0.50	CIRC	1	DRLIN2	CIR. BOTTOMS UP
3/23/2008	15:00 - 15:30	0.50	SUR	1	DRLIN2	WIRE LINE SURVEY CIR. ACROSS WELL HEAD NO LOSSES
	15:30 - 20:00	4.50	DRL	1	DRLIN2	DRILL F/ 7,555' TO 7,665' ( 110' @ 24.6' P/HR ) WOB 20-25 MUD WT 9.3 VIS 41 DH RPM 65 W/ 18 BBLs LOSSES
	20:00 - 21:00	1.00	CIRC	1	DRLIN2	CIR. BOTTOMS UP F/C WELL FLOWING W/ 9.3+ COMING OUT ( CHECK FLOW FOR 20 MINUTES FLOW STARTED TO INCREASE
	21:00 - 22:30	1.50	CIRC	1	DRLIN2	CIR. RAISE MUD WT TO 9.4+ & FLOW CHECK WELL STATIC
	22:30 - 03:30	5.00	TRP	10	DRLIN2	PUMP DRY PILL & TRIP OUT OF HOLE FOR BIT
	03:30 - 04:30	1.00	TRP	1	DRLIN2	CHANGE OUT MUD MOTOR & BIT
	04:30 - 06:00	1.50	TRP	2	DRLIN2	TRIP IN HOLE
	06:00 - 09:00	3.00	DRL	1	DRLIN2	TRIP IN HOLE
	09:00 - 09:30	0.50	REAM	1	DRLIN2	WASH & REAM F/ 7,475 TO BOTTOM @ 7,665' W/ 5' FILL
	09:30 - 14:00	4.50	DRL	1	DRLIN2	DRILL F/ 7,665' TO 7,840' ( 175' @ 39' P/HR ) WOB 8-12 MUD WT 9.3 VIS 42 DH RPM 65 W/ NO LOSSES
3/24/2008	14:00 - 14:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	14:30 - 18:00	3.50	DRL	1	DRLIN2	DRILL F/ 7,840' TO 7,925' ( 85' @ 25' P/HR ) WOB 10-16 MUD WT 9.3 VIS 44 DH RPM 65 W/ NO LOSSES
	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL F/ 7,925' TO 8,102' ( 177' @ 15.1' P/HR ) WOB 12-22 MUD WT 9.4 VIS 41 DH RPM 65 W/ NO LOSSES
	06:00 - 13:30	7.50	DRL	1	DRLIN2	DRILL F/ 8,102' TO 8,223' ( 121' @ 16.2 ) WOB 12-20 MUD WT 9.4 VIS 39 DH RPM 65 W/ NO LOSSES
3/25/2008	13:30 - 14:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	14:00 - 18:00	4.00	DRL	1	DRLIN2	DRILL F/ 8,223' TO 8,288' ( 65' @ 16.8' ) WOB 15-25 MUD WT 9.4 VIS 38 DH RPM 65 W/ NO LOSSES
	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL F/ 8,288' TO 8,500' ( 212' @ 17.9' P/HR ) WOB 15-25 MUD WT 9.4 VIS 41 DH RPM 65 W/ NO LOSSES
3/25/2008	06:00 - 07:30	1.50	DRL	1	DRLIN2	DRILL F/ 8,500 TO 8,518' ( 18' @ 12' P/HR ) WOB 25 MUD WT 9.4 VIS 39 DH RPM 65 W/ NO LOSSES
	07:30 - 09:00	1.50	CIRC	1	DRLIN2	CIR. HOLE CLEAN F/C OK DROP SURVEY & PUMP DRY PILL
	09:00 - 11:00	2.00	TRP	2	DRLIN2	TRIP OUT OF HOLE TO BHA
	11:00 - 11:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	11:30 - 18:00	6.50	TRP	1	DRLIN2	INSPECT ALL BHA BY THIRD PARTY

### Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release: Group:  
 Spud Date: 2/5/2008  
 End:  
 Rig Number: 328

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
3/25/2008	18:00 - 18:30	0.50	TRP	1	DRLIN2	P/UP NEW BIT & MUD MOTOR
	18:30 - 22:30	4.00	TRP	2	DRLIN2	TRIP IN HOLE
	22:30 - 23:30	1.00	RIG	6	DRLIN2	CUT DRILLING LINE
	23:30 - 03:00	3.50	TRP	2	DRLIN2	CONTINUE TO TRIP IN HOLE ( TIGHT HOLE @ 6403' & 7555' )
	03:00 - 03:30	0.50	REAM	1	DRLIN2	WASH & REAM F/ 8384' TO 8518'
	03:30 - 06:00	2.50	DRL	1	DRLIN2	DRILL F/ 8,518' TO 8,575' ( 57' @ 24' P/HR ) WOB 16-20 MUD WT 9.4 VIS 38 DH RPM 65 W/ NO LOSSES
3/26/2008	06:00 - 12:30	6.50	DRL	1	DRLIN2	DRILL F/ 8,575' TO 8,797' ( 222' @ 34.2' P/HR ) WOB 12-20 MUD WT 9.4 VIS 41 DH ROM 65 W/ NO LOSSES
	12:30 - 13:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	13:00 - 18:00	5.00	DRL	1	DRLIN2	DRILL F/ 8,797' TO 8,935' ( 138' @ 28.5' P/HR ) WOB 14-22 MUD WT 9.4 VIS 39 DH RPM 65 W/ NO LOSSES
	18:00 - 06:00	12.00	DRL	1	DRLIN2	DRILL F/ 8,935' TO 9,256' ( 321' @ 27.1' P/HR ) WOB 12-22 MUD WT 9.4 VIS 42 DH RPM 65 W/ NO LOSSES ( TOP OF MESAVERDE @ 9,073' )
3/27/2008	06:00 - 10:00	4.00	DRL	1	DRLIN2	DRILL FROM 9,256 TO 9,371(ROP 28.75' HR) WOB 15-22, DHRPM 65-70, MW 9.4, VIS 42, BG GAS 65 UNITS,
	10:00 - 10:30	0.50	RIG	1	DRLIN2	SERVICE TOP DRIVE, BLOCKS
	10:30 - 21:00	10.50	DRL	1	DRLIN2	DRILL FROM 9,371 TO 9,654 (ROP 26.9' HR) WOB 15-22, DHRPM 65, MW 9.5, VIS 42, BG GAS 30 UNITS, IN AND OUT OF SAND STONE AND SILT STONE
	21:00 - 21:30	0.50	OTH		DRLIN2	WORK ON HOOK LOAD SENSOR AND RE CALIBRATE
	21:30 - 06:00	8.50	DRL	1	DRLIN2	DRILL FROM 9,654 TO 9,940 (ROP 33.6' HR) WOB 15-24, DHRPM 77, MW 9.5, VIS 40, BG GAS 191(NO LOSSES) PUMPING 10 BBL. BIT BALL SWEEP-WHEN ROP SLOWS
3/28/2008	06:00 - 06:30	0.50	DRL	1	DRLIN2	WORK TIGHT CONNECTION FROM 9940 TO 9845 BROGHT MW UP TO 9.6
	06:30 - 13:30	7.00	DRL	1	DRLIN2	DRILL FROM 9,940 TO 10,131(ROP 27.2' HR) WOB 15-24, DHRPM 110, MW 9.8, VIS 44 BG GAS 5600 UNITS- NO FLARE
	13:30 - 14:00	0.50	RIG	1	DRLIN2	SERVICE RIG
	14:00 - 23:00	9.00	DRL	1	DRLIN2	DRILL FROM 10,131 TO 10,256 (ROP 13.8' HR) DRILLED SLOW WHILE(WORKED ALL DIFFERNT PERAMETERS) WEIGHTING UP MUD AND FIGHT LOST CIRCULATION BY PASSED SHAKERS WITH 7% LCM IN MUD/ MW 10.4 (TOTAL LOSSES APROX. 180 BBL.S)
	23:00 - 23:30	0.50	SUR	1	DRLIN2	CHECKED FLOW -NO FLOW- DROPPED SURVEY,
	23:30 - 00:30	1.00	CIRC	1	DRLIN2	CIRCULATE BOTTOMS UP AND BUILD TRIP SLUG
3/29/2008	00:30 - 05:30	5.00	TRP	10	DRLIN2	TRIP OUT OF HOLE, HOLE IN GOOD CONDITION NO TIGHT SPOTS
	05:30 - 06:00	0.50	TRP	1	DRLIN2	CHANGING OUT MUD MOTOR AND BIT
	06:00 - 06:30	0.50	TRP	1	DRLIN2	PICK UP NEW MOTOR AND BIT
	06:30 - 09:30	3.00	TRP	10	DRLIN2	TRIP IN HOLE FILL @ BHA, SHOE
	09:30 - 10:00	0.50	OTH		DRLIN2	CHANGE OUT SAVER SUB
	10:00 - 15:30	5.50	RIG	2	DRLIN2	TOP DRIVE PANEL NOT READING TORQUE, RPMS, (CAN'T TELL HOW TIGHT CONNECTIONS ARE TORQUED--TRIED TO REST TOP DRIVE SCR HOUSE-DIDN'T WORK (HAND COMING FROM GRAND JUNCTION) --CIRCULATE AT SHOE--FOUND THAT PLC CARDS ARE BAD-CAN RUN TOP DRIVE WITH COMPUTER IN SCR HOUSE BUT NO COMMUNICATION TO PANEL ON FLOOR FOR ROTATION OR TORQUE-EVERYTHING ELSE FUNCTIONS
	15:30 - 17:30	2.00	TRP	10	DRLIN2	TRIP IN HOLE TO
	17:30 - 19:30	2.00	RIG	2	DRLIN2	REPAIR TOP DRIVE GRABBER LINE INSIDE OF GRABBER LEG (TIGHT SPOT TO BE CHANGING LINES NO ROOM TO WORK)
	19:30 - 21:00	1.50	TRP	10	DRLIN2	TRIP IN HOLE TO 10,033
	21:00 - 23:00	2.00	REAM	1	DRLIN2	WASH AND REAM FROM 10,033 TO 10,259 LAST 10' HARD

**Operations Summary Report**

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
3/29/2008	21:00 - 23:00	2.00	REAM	1	DRLIN2	REAMING (CICULATE OUT GAS HAD 30' FLARE SHORT LIVED-DRILL FROM 10,259 TO 10,421 (ROP 23.1' HR) WOB 10-20, DHRPM 110, MW 10.6, VIS 44, BG GAS 450 ON BUSTER, HAVE 5% IN SYSTEM, HAVE SUM SLIP STICK
	23:00 - 06:00	7.00	DRL	1	DRLIN2	
3/30/2008	06:00 - 12:00	6.00	DRL	1	DRLIN2	DRILL FROM 10,421 TO 10,512 (ROP 15.2' HR) WOB 15-25, DHRPM 120-180, MW 10.8, VIS 43 HAD SOME SLIP STICK, DIDN'T DRILL UNLESS IT WAS SLIP STICKING??
	12:00 - 14:30	2.50	RIG	2	DRLIN2	CHANGE OUT PLC CARD IN TOP DRIVE SCR HOUSE (DIDN'T FIX PROBLEM AND TRY TO TROUBLE SHOOT--THINKING IT'S COMMUNICATION CARD IN CONSOLE
	14:30 - 18:30	4.00	DRL	1	DRLIN2	DRILL FROM 10,512 TO 10,549 WORK ALL DIFFERNT PERAMETERS TO GET TO DRILL-NO GO
	18:30 - 19:30	1.00	RIG	1	DRLIN2	SERVICE RIG-BLOCKS, TOP DRIVE-WORK ON CHILLER ON TOP DRIVE HOUSE
	19:30 - 21:00	1.50	CIRC	1	DRLIN2	CIRCULATE AND BUILD AND SPOT ECD SLUG 150 BBL.S
3/31/2008	21:00 - 02:30	5.50	TRP	10	DRLIN2	TRIP OUT OF HOLE
	02:30 - 03:30	1.00	TRP	1	DRLIN2	HANDLE BHA L/D AND PICK MOTOR AND BIT--
	03:30 - 04:00	0.50	OTH		DRLIN2	PICK UP HIGH PRESSURE HEAD
	04:00 - 06:00	2.00	TRP	10	DRLIN2	TRIP IN HOLE FILL @ BHA, SHOE
	06:00 - 07:00	1.00	TRP	10	DRLIN2	TRIP TO SHOE
	07:00 - 08:30	1.50	OTH		DRLIN2	TRIED TO PUT RUBBER ONTO DRILL PIPE, RUBBER WON'T SLIDE ON TO DRILL PIPE,
	08:30 - 09:30	1.00	OTH		DRLIN2	SWITCH OUT TO LOW PRESSURE HEAD--TALKED TO SMITH HAND AND SAID HE'S GOING TO BORE A DIFFERNT ONE---WE'LL BE FINE WITH THIS LOW PRESSURE HEAD UNTIL WE HIT GAS IN SEGO (A WELL NEAR (WVX 11D) BY HAD TO DRILL UNDER BALANCED FROM @ 11,500' THRU THIS SECTION)
	09:30 - 10:00	0.50	CIRC	1	DRLIN2	CIRCULATE OUT HEAVY TRIP SLUG @ SHOE
	10:00 - 11:30	1.50	TRP	10	DRLIN2	TRIP IN HOLE TO 8254
	11:30 - 12:00	0.50	CIRC	1	DRLIN2	CIRCULATE ECD SLUG UP INTO CASING
	12:00 - 13:00	1.00	TRP	10	DRLIN2	TRIP IN HOLE TO 10,190
	13:00 - 14:30	1.50	REAM	1	DRLIN2	WASH AND REAM FROM 10,190 TO 10,549
	14:30 - 15:00	0.50	DRL	1	DRLIN2	DRILL FROM 10,549 TO 10,552
	15:00 - 16:30	1.50	CIRC	2	DRLIN2	LOST CIRCULATION ECD SLUG WAS 1,847 FT SHY OF BEING OUT OF HOLE, PUMP 20 BBL.S 20% LCM SWEEP, PULL 5 STANDS AND TRY TO REGAIN CIRC.(NONE), PULL 10 MORE (NO CIRC.)
	16:30 - 17:30	1.00	TRP	15	DRLIN2	TRIP IN HOLE TO SPOT POLY SWELL SWEEP AND 175 BBL. 20% LCM SWEEP
17:30 - 19:30	2.00	CIRC	2	DRLIN2	SPOT50 BBL. POLY SWELL FOLLOWED BY 175 BBL. 20% LCM SWEEP AND DISPLACE, WORKING STRING UP QUICK AND DOWN SLOW TRYING TO REGAIN CIRC, STARTED GETTING FLOW ON WAY UP AND DOWN--DIDN'T GET ANY RETURNS	
19:30 - 23:00	3.50	TRP	15	DRLIN2	TRIP OUT TO SHOE (WET) TO LET SOAK( HOLE NOT TAKING ANY FLUID ON TRIP (TRY TO FILL HOLE AND HAVE RETURNS RIGHT A WAY) TRY CIRCULATING @ SHOE NO RETURNS	
23:00 - 00:00	1.00	RIG	6	DRLIN2	CUT AND SLIP DRILLING LINE-CALL ON ORDERS FROM STEVE LAWS	
00:00 - 02:00	2.00	TRP	10	DRLIN2	TRIP OUT HALF WAY INTO CASING (WET) TO SEE IF REGAIN CIRCULATION (REGAINED CIRCULATION) GET MW TO 10.6 AND LCM 15%	

### Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: DRILLING  
 Contractor Name: Unit Drilling Co.  
 Rig Name: UNIT

Start: 2/21/2008  
 Rig Release:  
 Rig Number: 328

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
3/31/2008	00:00 - 02:00	2.00	TRP	10	DRLIN2	
	02:00 - 03:30	1.50	CIRC	2	DRLIN2	CIRCULATE GETTING PROPERTIES IN SHAPE TO STAGE INTO HOLE AND BUILD MUD VOLUME
	03:30 - 04:00	0.50	TRP	15	DRLIN2	TRIP IN 8 STANDS VERY SLOW
	04:00 - 04:30	0.50	CIRC	1	DRLIN2	CIRCULATE AND KEEPING MUD WT @ 10.6
	04:30 - 05:00	0.50	TRP	15	DRLIN2	TRIP IN VERY SLOW 10 STANDS
	05:00 - 05:30	0.50	CIRC	1	DRLIN2	CIRCULATE AND KEEP MUD WT @ 10.6
	05:30 - 06:00	0.50	TRP	15	DRLIN2	TRIP TO SHOE SLOW
4/1/2008	06:00 - 06:30	0.50	TRP	15	DRLIN2	TRIP IN TO 5,101
	06:30 - 07:30	1.00	CIRC	2	DRLIN2	CIRCULATE BOTTOMS UP CUT MW TO 10.6 15% LCM
	07:30 - 08:30	1.00	TRP	15	DRLIN2	TRIP IN TO 6,189
	08:30 - 09:30	1.00	CIRC	2	DRLIN2	CIRCULATE BOTTOMS UP CUT MW TO 10.6 15% LCM
	09:30 - 10:30	1.00	TRP	15	DRLIN2	TRIP IN TO 7,546
	10:30 - 11:30	1.00	CIRC	2	DRLIN2	CIRCULATE BOTTOMS UP CUT MW TO 10.6 15% LCM
	11:30 - 12:00	0.50	TRP	15	DRLIN2	TRIP IN TO 8,602
	12:00 - 12:30	0.50	CIRC	2	DRLIN2	CIRCULATE BOTTOMS UP CUT MW TO 10.6 15% LCM
	12:30 - 13:30	1.00	TRP	15	DRLIN2	TRIP IN TO 9,657
	13:30 - 14:30	1.00	CIRC	2	DRLIN2	CIRCULATE BOTTOMS UP CUT MW TO 10.6 15% LCM
	14:30 - 15:00	0.50	TRP	15	DRLIN2	TRIP IN TO 10,313
	15:00 - 16:30	1.50	REAM	1	DRLIN2	WASH AND REAM F/10,313 TO 10,552 (HAD TO CUT BACK STROKES TO MAINTAIN MUD)
	16:30 - 06:00	13.50	DRL	1	DRLIN2	DRILL FROM 10,552 TO 10,745 (ROP 14.3' HR) WOB 6-10, DHRPM 128, MW 10.6+, VIS 41--DRILLING REAL SHARP SANDS

**NOTICE OF LATE REPORTING  
DRILLING & COMPLETION INFORMATION**

Utah Oil and Gas Conservation General Rule R649-3-6 states that,

- Operators shall submit monthly status reports for each drilling well (including wells where drilling operations have been suspended).

Utah Oil and Gas Conservation General Rule R649-3-21 states that,

- A well is considered completed when the well has been adequately worked to be capable of producing oil or gas or when well testing as required by the division is concluded.
  
- Within 30 days after the completion or plugging of a well, the following shall be filed:
  - Form 8, Well Completion or Recompletion Report and Log
  - A copy of electric and radioactivity logs, if run
  - A copy of drillstem test reports,
  - A copy of formation water analyses, porosity, permeability or fluid saturation determinations
  - A copy of core analyses, and lithologic logs or sample descriptions if compiled
  - A copy of directional, deviation, and/or measurement-while-drilling survey for each horizontal well

Failure to submit reports in a timely manner will result in the issuance of a Notice of Violation by the Division of Oil, Gas and Mining, and may result in the Division pursuing enforcement action as outlined in Rule R649-10, Administrative Procedures, and Section 40-6-11 of the Utah Code.

---

As of the mailing of this notice, the division has not received the required reports for

Operator: QUESTAR EXPLORATION & PRODUCTION CO

Today's Date: 06/27/2008

Well: 43 047 38049  
WV 11AD-1A-8-21  
8S 21E 1A

API Number:

Drilling Commenced:

List Attached

To avoid compliance action, required reports should be mailed within 7 business days to:

Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

If you have questions or concerns regarding this matter, please contact Rachel Medina  
at (801) 538-5260.

cc: Well File  
Compliance File

**NOTICE OF LATE REPORTING  
DRILLING & COMPLETION INFORMATION**

**ATTACHMENT**

Operator: QUESTAR EXPLORATION & PRODUCTION CO

Today's Date: 06/27/2008

Well:	API Number:	Drilling Commenced:
TU 3-35-7-21	4304738995	11/06/2007
WV 11AD-14-8-21	4304738049	11/17/2007
NBE 8BD-26-9-23	4304739351	12/27/2007
NBE 10CD-17-9-23	4304739349	01/09/2008
CWU 16D-32-8-24	4304737278	01/10/2008
RWS 8D-5-9-24	4304737307	01/11/2008
RWS 14D-5-9-24	4304737310	01/11/2008
NBZ 11D-29-8-27	4304737240	01/13/2008
NBZ 5D-29-8-24	4304737241	01/13/2008
NBZ 4D-30-8-24	4304737229	01/14/2008
NBZ 12D-30-8-24	4304737233	01/14/2008
SCS 10C-16-15-19	4304739683	01/15/2008
WRU EIH 4AD-25-8-22	4304738636	01/21/2008
RW 04-25B	4304736982	02/05/2008
NBZ 15ML-29-8-24	4304737246	02/06/2008
RWS 16ML-5-9-24	4304737311	02/06/2008
NBZ 10ML-30-8-24	4304737232	02/07/2008
NBZ 14ML-30-8-24	4304737234	02/07/2008
FR 13P-20-14-20	4304739226	02/16/2008

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**CONFIDENTIAL**

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir  
Use "APPLICATION FOR PERMIT--" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well  
Oil Gas  
 Well  Well  Other

2. Name of Operator  
**QEP Uinta Basin, Inc.**

3. Address and Telephone No.  
**11002 E. 17500 S. Vernal, UT 84078, (435) 781-4331**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2601 FSL 2611 FEL, SECTION 14, T8S, R21E**

5. Lease Designation and Serial No.  
**UTU-0807**

6. If Indian, Allottee or Tribe Name  
**UTE**

7. If Unit or CA, Agreement Designation  
**Wonsits Valley**

8. Well Name and No.  
**WV 11AD-14-8-21**

9. API Well No.  
**43-047-38049**

10. Field and Pool, or Exploratory Area  
**Wonsits Valley**

11. County or Parish, State  
**UINTAH, UT**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Wildcat tax credit application</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note) Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)

**Questar requests that the wildcat tax credit be applied to the WV 11AD-14-8-21 well. This is the first well in the Mancos / Dakota pool within a one mile radius (see attached map). Offset wells include:**

Well Name	API	TD	Formation at TD
- WV 7BD-23-8-21	43047390440000	drilling	Drilling
- WV 14M-11-8-21	43047342800000	13223	Mancos
- etc.			

**RECEIVED**

**JUN 02 2008**

**DIV. OF OIL, GAS & MINING**

14. I hereby certify that the foregoing is true and correct.

Signed [Signature] Title Sr Geologist Date 29 May 08

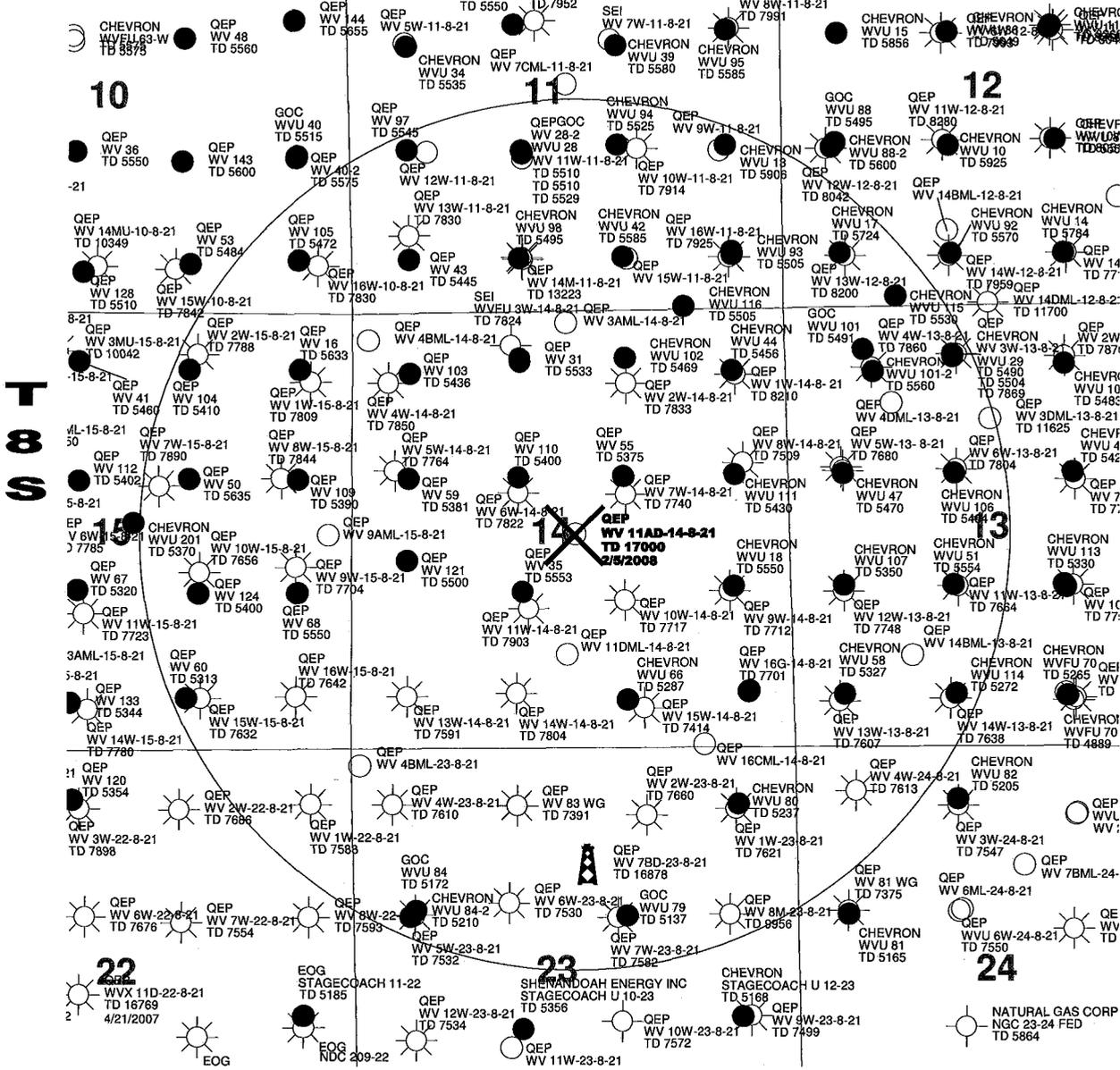
(This space for Federal or State office use)

Approved by: [Signature] Title Pet. Eng Date Feb 24, 2009

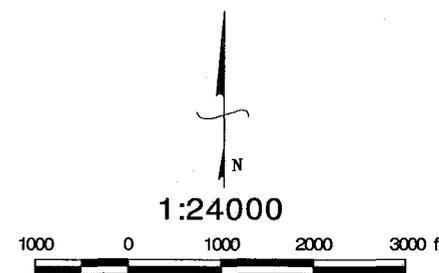
Conditions of approval, if any \* See statement of Basis (Attached). For Frontier, Dakota Form only

Title 18 U.S.C. Section 1001, makes 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. cc: Tax Commission (via Email)

# R 21 E



Well Status	
	D&A
	GAS
	LOC
	OIL
	SI



1050 17 <sup>th</sup> , Suite 500 Denver, Colorado 80265 303 672-6900		 Exploration & Production	
<h2>WV 11AD-14-8-21</h2>			
Date: May 12, 2008		Geologist:	
Landman:		Geophysicist:	
Engineer:		File:...\Uinfo\CJO_RAGTaxCr\WV 11AD-14-8-21	

# Fluid Entry Results

Company: Questar Exploration & Production  
 Well: WV 11AD-14-8-21  
 Date: 12-Sep-08  
 Field:

Metered Rates Gas: 1.3 mmcf/d  
 Water: 150 B/D  
 Oil: 15 B/D

NOTE: Only perms that are contributing towards production are listed. Please see "Data Cover" for a list of all perms.

Reservoir Zone	Perforations Depth (ft)	Gas		Water	
		Surface mmcf/d	%	Surface B/D	%
Wasatch	6758-6760	0.353	29.56%	150.000	100.00%
Wasatch	6878-6880	0.018	1.51%		
Wasatch	7234-7236	0.016	1.34%		
Mesa Verde	9250-9252	0.045	3.77%		
Mesa Verde	9777-9779	0.131	10.97%		
Lower Mesa Verde	9916-9918	0.061	5.11%		
Lower Mesa Verde	10062-10064	0.022	1.84%		
Lower Mesa Verde	10109-10111	0.004	0.34%		
Lower Mesa Verde	10776-10778	0.008	0.67%		
Lower Mesa Verde	10854-10856	0.027	2.26%		
Lower Mesa Verde	11149-11151	0.032	2.68%		
Lower Mesa Verde	11303-11305	Trace	---		
Blackhawk	11997-11998	0.017	1.42%		
Blackhawk	12042-12044	0.094	7.87%		
Blackhawk	12205-12206	0.040	3.35%		
Blackhawk	12488-12489	0.004	0.34%		
Mancos	12752-12753	Trace	---		

Mancos B	12882-12883	0.029	2.43%		
Mancos	14802-14803	0.026	2.18%		
Mancos	14907-14909	Trace	---		
Frontier	15576-15578	Trace	---		
Frontier	15980-15982	0.007	0.59%		
Dakota Silt	16475-16477	0.024	2.01%		
Dakota Silt	16585-16586	0.037	3.10%		
Dakota SS	16679-16681	0.199	16.67%		

**Total: 1.194 mmcf/d 100% 150 B/D 100%**

# *SMOLEN ASSOCIATES* \_\_\_\_\_

## **PLATO PRODUCTION LOG ANALYSIS REPORT**

**Name of Well:** QUESTAR WV 11AD-14-8-21  
**Name of Analyst** Jim Smolen  
**Date of Analysis:** Fri Sep 19 15:47:34 2008  
**Company:** QUESTAR E&P

*All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.*

---

**SMOLEN ASSOCIATES  
2122 N. FOUNTAIN VALLEY  
MISSOURI CITY, TEXAS USA 77459-3647  
281 438-1141  
smolen@pdq.net**

## Overview

The production log analysis was performed based on a global stochastic optimization technique. In this technique a flow model was compared to all available data and improved until the best possible match with the data was obtained. A comparison, between the model and the data, is shown in this report and allows to identify remaining discrepancies. These can be due to tool deficiencies, conflicts between the parameters or conditions that make the underlying empirical models (such as flow regimes) less applicable.

The flow regimes were determined, directly from the flow rates and holdups, according to the Dukler - Taitel analytic model.

The profile factors, to calculate the average effective fluid velocity from the apparent velocity, were based on the Reynolds numbers, calculated from the phase velocities and phase properties.

Where gas was present the density, heat capacity and Joule-Thompson coefficients were derived from the Lee Kesler Pitzer equation of states.

Solution gas in oil was derived from the Vasquez and Beggs or Ostein Glas0 correlation.

The analysis was performed in five steps:

- The data preparation to filter the data, compute gradients and error estimates.
- The flow meter analysis to compute the apparent velocity.
- The profile determination to identify the potential producing and/or injecting zones.
- The computation of the flow rates by global optimization.
- The computation of surface productions and reporting.

For each analysis step, a summary of results and input parameters is provided in the report.

Under the assumptions made during the analysis and described hereafter the following production/injection rates were found:

Depth		Profile	Qp-Water-STP	Qp-Gas-STP
feet			BFPD	MCFD
Surface	6540.00	Flow	0	0
6540.00	6688.00	Flow	0	0
6688.00	6800.00	Produce	150	353
6800.00	6856.00	Flow	0	0
6856.00	6895.00	Produce	0	18.0
6895.00	7163.00	Flow	0	0
7163.00	7250.00	Produce	0	16.1
7250.00	9229.00	Flow	0	0
9229.00	9305.00	Produce	0	44.6
9305.00	9758.00	Flow	0	0
9758.00	9797.00	Produce	0	131
9797.00	9900.00	Flow	0	0
9900.00	9939.00	Produce	0	60.6
9939.00	10051.00	Flow	0	0

# SMOLEN ASSOCIATES

10051.00	10079.00	Produce	0	21.8
10079.00	10102.00	Flow	0	0
10102.00	10132.00	Produce	0	4.40
10132.00	10183.00	Flow	0	0
10183.00	10219.00	Produce	0	0
10219.00	10244.00	Flow	0	0
10244.00	10280.00	Produce	0	0
10280.00	10770.00	Flow	0	0
10770.00	10800.00	Produce	0	8.35
10800.00	10842.00	Flow	0	0
10842.00	10881.00	Produce	0	26.8
10881.00	10993.00	Flow	0	0
10993.00	11024.00	Produce	0	.848
11024.00	11139.00	Flow	0	0
11139.00	11175.00	Produce	0	31.6
11175.00	11273.00	Flow	0	0
11273.00	11323.00	Produce	0	.0224
11323.00	11989.00	Flow	0	0
11989.00	12016.00	Produce	0	17.0
12016.00	12033.00	Flow	0	0
12033.00	12061.00	Produce	0	93.7
12061.00	12098.00	Flow	0	0
12098.00	12134.00	Produce	0	0
12134.00	12195.00	Flow	0	0
12195.00	12226.00	Produce	0	42.3
12226.00	12481.00	Flow	0	0
12481.00	12520.00	Produce	0	3.50
12520.00	12735.00	Flow	0	0
12735.00	12785.00	Produce	0	.0217
12785.00	12866.00	Flow	0	0
12866.00	12908.00	Produce	0	28.9
12908.00	12941.00	Flow	0	0
12941.00	13008.00	Produce	0	0
13008.00	13281.00	Flow	0	0
13281.00	13348.00	Produce	0	0

Depth		Profile	Qp-Water-STP	Qp-Gas-STP
feet			BFPD	MCFD
13348.00	13683.00	Flow	0	0
13683.00	13723.00	Produce	0	0
13723.00	13992.00	Flow	0	0
13992.00	14028.00	Produce	0	0

# SMOLEN ASSOCIATES

14028.00	14278.00	Flow	0	0
14278.00	14327.00	Produce	0	0
14327.00	14770.00	Flow	0	0
14770.00	14824.00	Produce	0	26.3
14824.00	14895.00	Flow	0	0
14895.00	14949.00	Produce	0	.0176
14949.00	15258.00	Flow	0	0
15258.00	15334.00	Produce	0	0
15334.00	15562.00	Flow	0	0
15562.00	15611.00	Produce	0	.0101
15611.00	15969.00	Flow	0	0
15969.00	16005.00	Produce	0	7.45
16005.00	16465.00	Flow	0	0
16465.00	16497.00	Produce	0	24.0
16497.00	16575.00	Flow	0	0
16575.00	16602.00	Produce	0	36.5
16602.00	16676.00	Flow	0	0
16676.00	16689.00	Produce	0	199
16689.00	16850.00	WellBottom	0	0
16850.00	Bottom	WellBottom	ABSENT	ABSENT

## Well information

The Well was analyzed as a two phase water/gas production Well.

The tool diameter was 1.69 in and the reported pipe diameter and deviation were:

<b>DPipe</b>	<b>in</b>	3.83
<b>PipeAngle</b>	<b>DegAng</b>	0

The following surface production rates were reported:

<b>QWaterSurf</b>	<b>BFPD</b>	150
<b>QGasSurf</b>	<b>MMCFD</b>	1.30

## PVT information

The water density and viscosity were calculated using a salinity of 25000 ppm. The Craft & Hawkins correlation was used. The Pc and Tc parameters were calculated using the Brown et al. correlation. The gas viscosity was calculated using the Lee Gonzales Eakin correlation.

The following gas parameters were used:

<b>GasType</b>		Miscellaneous
<b>SPGG</b>	<b>UNITY</b>	.682
<b>GP-CO2</b>	<b>UNITY</b>	0
<b>GP-H2S</b>	<b>UNITY</b>	0
<b>GP-Nitrogen</b>	<b>UNITY</b>	0

From the above fluid information, temperature and pressure the following fluid properties, at Well conditions, were calculated:

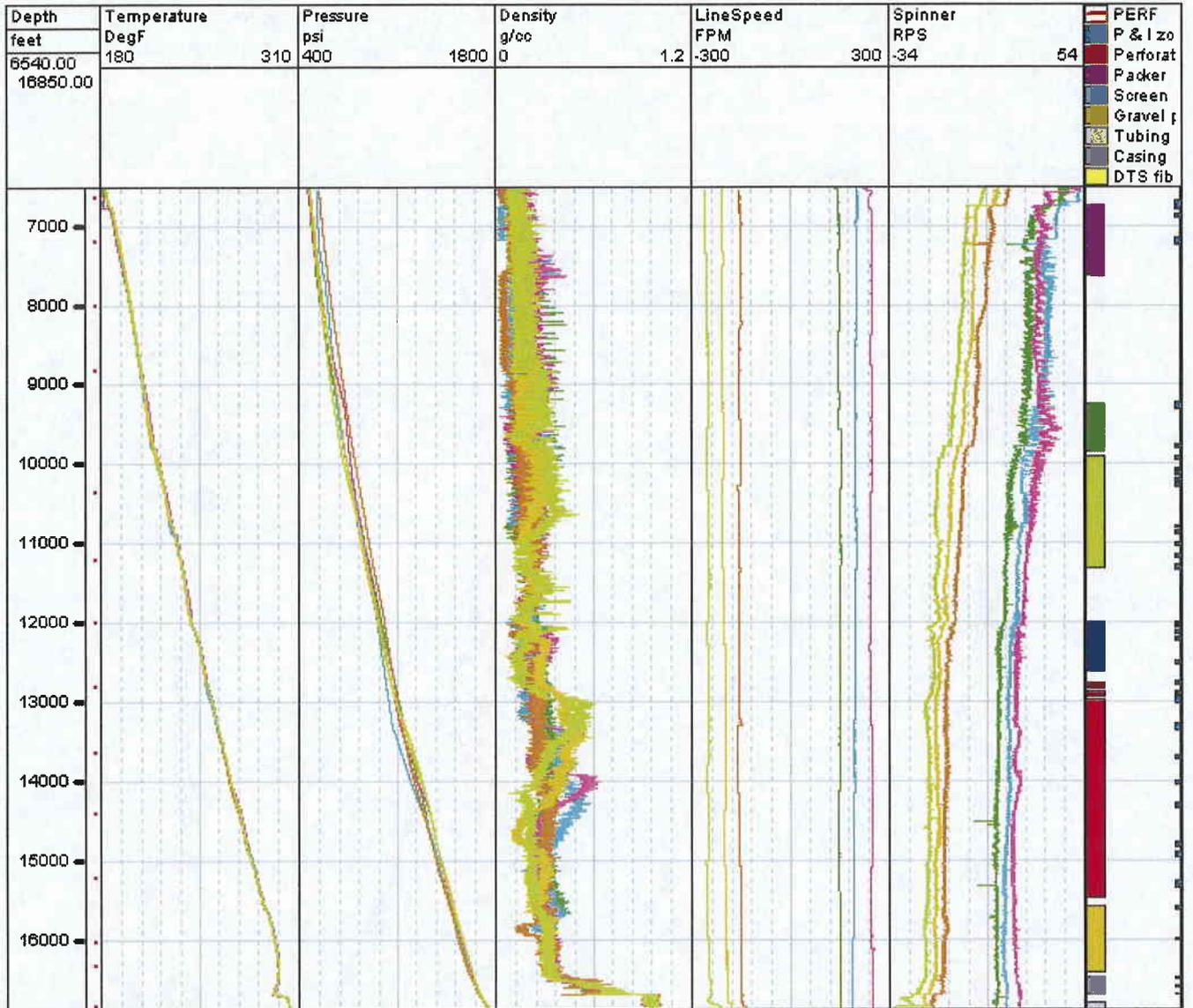
<b>Depth</b>	<b>Rho-Water</b>	<b>Visco-Water</b>	<b>Rho-Gas</b>	<b>Visco-Gas</b>
feet	g/cc	cP	g/cc	cP
6540.00	.991	.370	.0232	.0134
7686.00	.986	.337	.0258	.0137
8831.00	.982	.317	.0297	.0140
9977.00	.978	.297	.0338	.0144
11122.00	.973	.276	.0386	.0148
12268.00	.967	.257	.0436	.0152
13413.00	.961	.241	.0491	.0156
14559.00	.954	.225	.0560	.0162
15704.00	.946	.210	.0615	.0167
16850.00	.939	.199	.0697	.0173

Tool Information

For fluid identification the pressure gradient and fluid density tools were used.

## The Logging Data

The figure below summarizes the input data recorded at the Well side. Each pass is shown with a fixed predefined color.

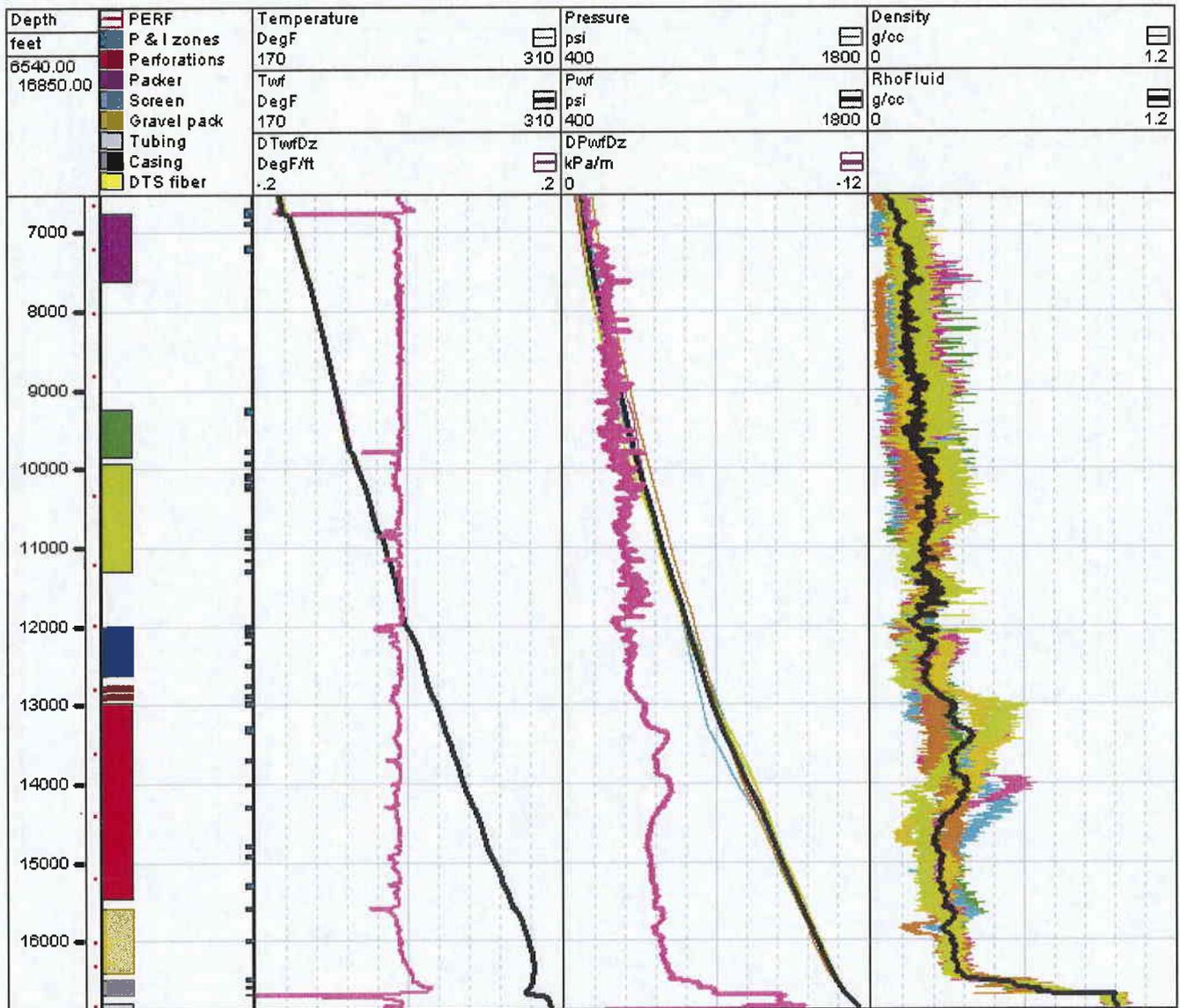


## Data preparation

Before performing the analysis, the log data was filtered and spikes were removed. In some cases several passes were averaged to obtain a more accurate measurement.

The figure below shows the result of this computation. Each pass is shown with a fixed predefined color. For temperature and pressure the gradients along the Well bore were calculated. The curve names are respectively DTwfDz for the temperature gradient and DPwfDz for the pressure gradient.

Each output log is associated with an estimate of the error. The error curves have the following names: *Tool-ERP*.

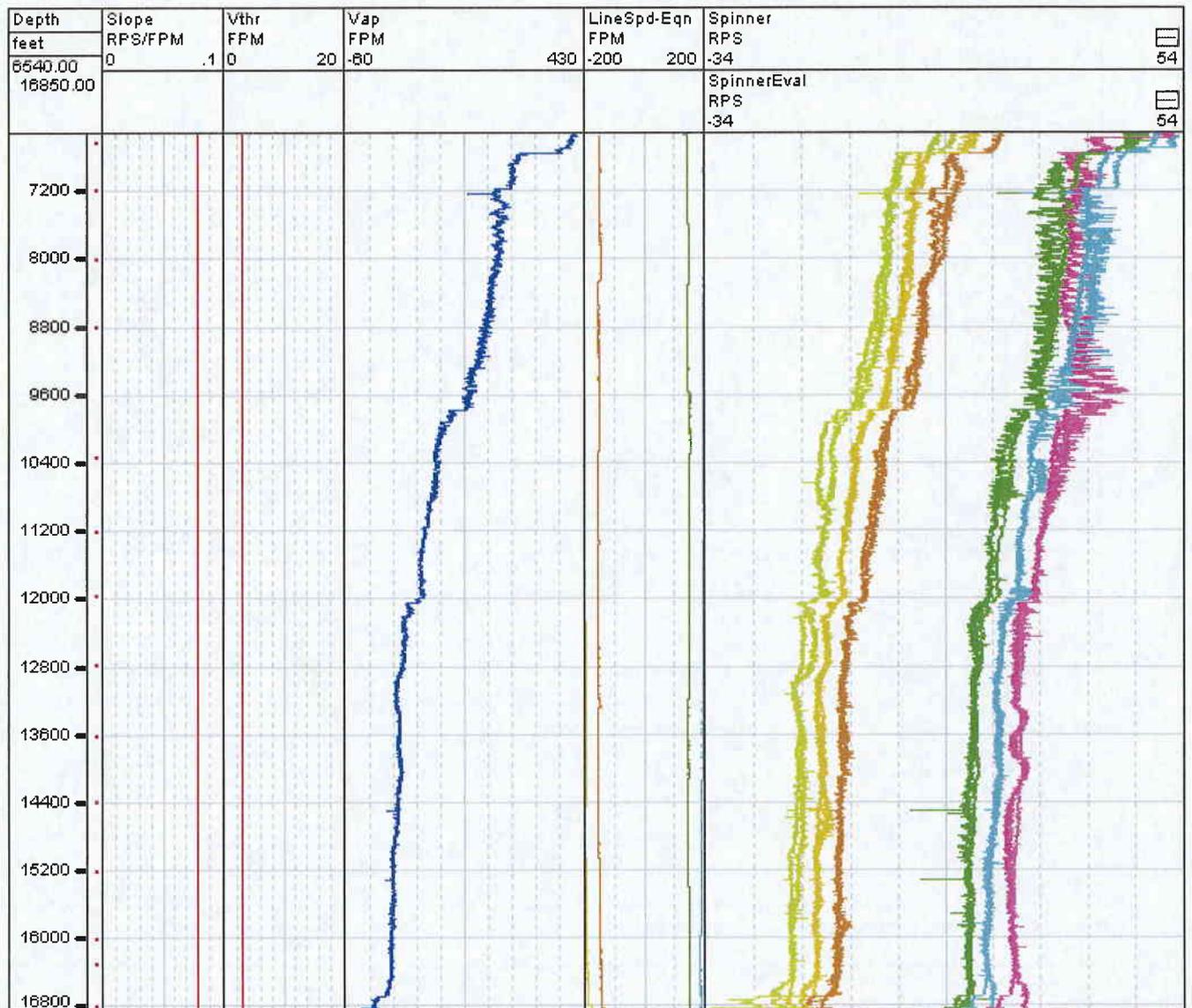


### Observation

Stationary spinner recorded at 16820' shows no flow at this depth.

## Computation of the apparent velocity

The spinner was analyzed to calculate the apparent velocity at each depth. The spinner sensitivity (Slope) and threshold (Vthr) were calculated globally (held constant over zones) and are shown in the figure below. The figure shows a comparison between the flowmeter data and the flowmeter values calculated for each cable speed, with the globally determined slope and intercept. For each cable speed a different color is used. The data is shown as solid lines and the calculated values in dotted lines. For a good calibration the solid lines and dotted lines should match for each pass (color).



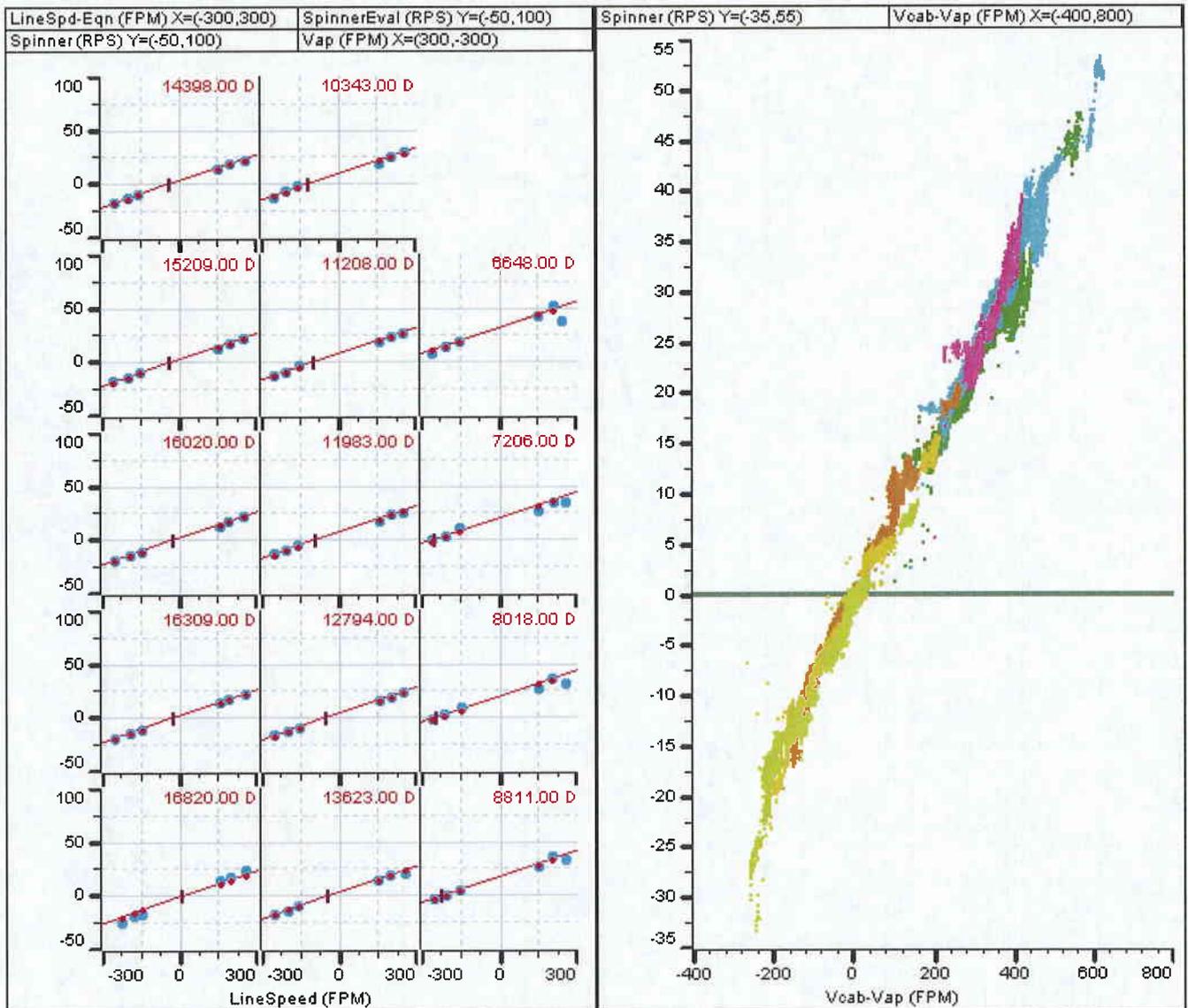
The quality of the data and calibration can be judged from the figure below.

The cross plots to the left show a comparison of the data and calculated values at selected depths. The blue dots represent the data while the red line and dots represent the calculated values.

To the right a cross plot is presented with all the flowmeter data.

Each pass is shown with a fixed predefined color.

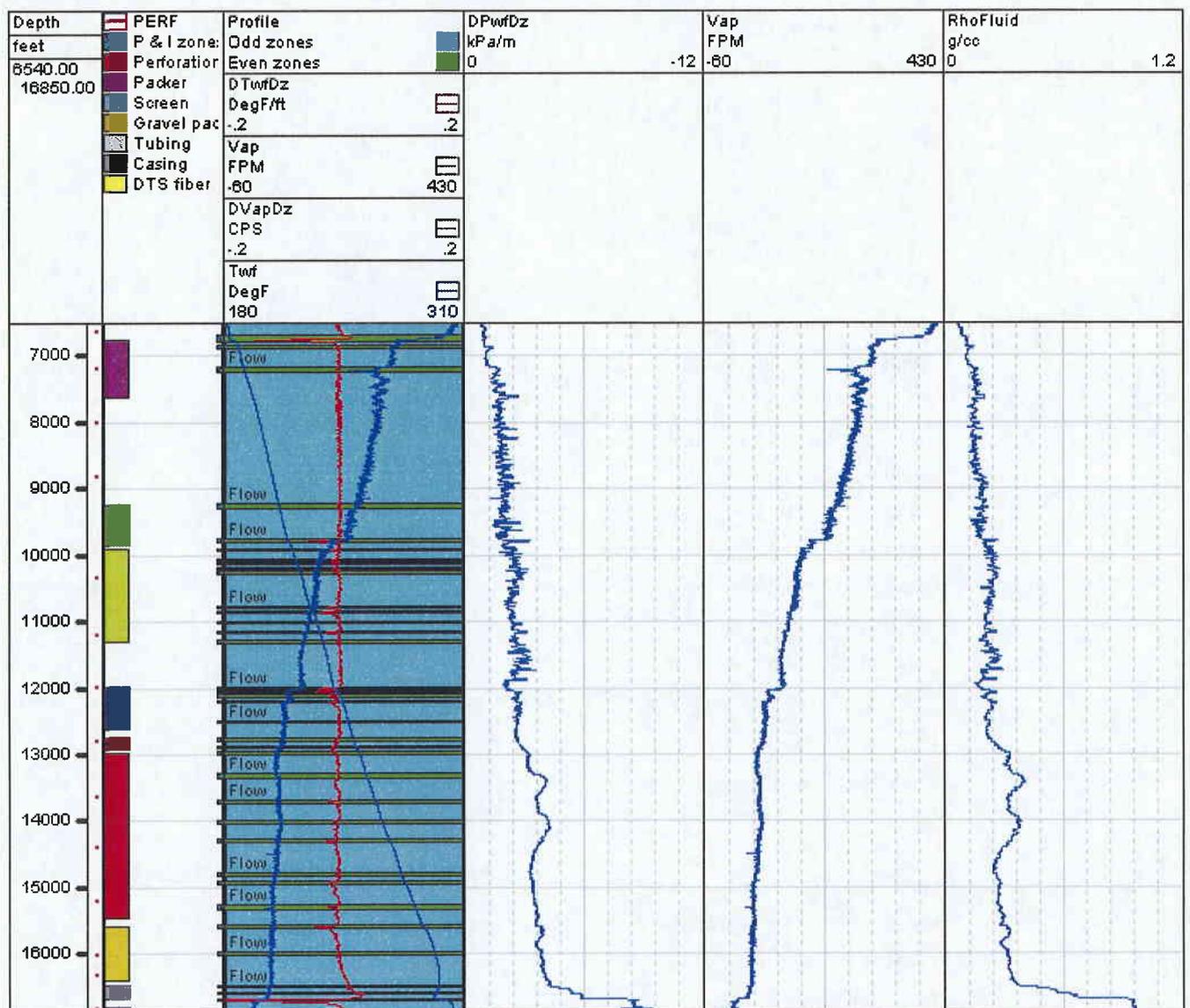
To allow a comparison of all the data, the cable speed is corrected for the apparent velocity of the fluids. A good calibration will result in data points clustered along a straight or broken line.



## Determination of the flow profile

Starting from the pre-processed data, the perforations, the temperature and apparent velocity the production, injection and flowing zones can be established. The figure below summarizes the pre-processed data and the zoning of the Profile parameter. This parameter specifies if the zone is producing, injecting or simply flowing. The coloring of the profile is only to visualize the range of each zone. Within each producing/injecting zone the production/injection rate is constant. However, several producing/injecting zones, with different rates, can be used to capture the variations in the production (injection) rate.

In the profile track the apparent velocity (Vap) and temperature gradient are shown. The temperature gradient is a sensitive indicator of changes in flowrate even behind the casing.



## Determination of the flow rates

The quantitative production rates were determined by comparing the Well flow model with all available data. In addition constraints on the surface flow rates and material balance were imposed.

After a global optimization the following production and flow rates were found.

Depth		Profile	Q-Water-STP	Qp-Water-STP	Q-Gas-STP	Qp-Gas-STP
feet			BFPD	BFPD	MCFD	MCFD
Surface	6540.00	Flow	150	0	1195	0
6540.00	6688.00	Flow	150	0	1195	0
6688.00	6800.00	Produce	150	150	1195	353
6800.00	6856.00	Flow	0	0	841	0
6856.00	6895.00	Produce	0	0	841	18.0
6895.00	7163.00	Flow	0	0	823	0
7163.00	7250.00	Produce	0	0	823	16.1
7250.00	9229.00	Flow	0	0	807	0
9229.00	9305.00	Produce	0	0	807	44.6
9305.00	9758.00	Flow	0	0	763	0
9758.00	9797.00	Produce	0	0	763	131
9797.00	9900.00	Flow	0	0	632	0
9900.00	9939.00	Produce	0	0	632	60.6
9939.00	10051.00	Flow	0	0	571	0
10051.00	10079.00	Produce	0	0	571	21.8
10079.00	10102.00	Flow	0	0	549	0
10102.00	10132.00	Produce	0	0	549	4.40
10132.00	10183.00	Flow	0	0	545	0
10183.00	10219.00	Produce	0	0	545	0
10219.00	10244.00	Flow	0	0	545	0
10244.00	10280.00	Produce	0	0	545	0
10280.00	10770.00	Flow	0	0	545	0
10770.00	10800.00	Produce	0	0	545	8.35
10800.00	10842.00	Flow	0	0	537	0
10842.00	10881.00	Produce	0	0	537	26.8
10881.00	10993.00	Flow	0	0	510	0
10993.00	11024.00	Produce	0	0	510	.848
11024.00	11139.00	Flow	0	0	509	0
11139.00	11175.00	Produce	0	0	509	31.6
11175.00	11273.00	Flow	0	0	477	0
11273.00	11323.00	Produce	0	0	477	.0224
11323.00	11989.00	Flow	0	0	477	0
11989.00	12016.00	Produce	0	0	477	17.0
12016.00	12033.00	Flow	0	0	460	0

# SMOLEN ASSOCIATES

12033.00	12061.00	Produce	0	0	460	93.7
12061.00	12098.00	Flow	0	0	367	0
12098.00	12134.00	Produce	0	0	367	0
12134.00	12195.00	Flow	0	0	367	0
12195.00	12226.00	Produce	0	0	367	42.3
12226.00	12481.00	Flow	0	0	324	0
12481.00	12520.00	Produce	0	0	324	3.50
12520.00	12735.00	Flow	0	0	321	0
12735.00	12785.00	Produce	0	0	321	.0217
12785.00	12866.00	Flow	0	0	321	0
12866.00	12908.00	Produce	0	0	321	28.9
12908.00	12941.00	Flow	0	0	292	0
12941.00	13008.00	Produce	0	0	292	0
13008.00	13281.00	Flow	0	0	292	0
13281.00	13348.00	Produce	0	0	292	0

Depth		Profile	Q-Water-STP	Qp-Water-STP	Q-Gas-STP	Qp-Gas-STP
feet			BFPD	BFPD	MCFD	MCFD
13348.00	13683.00	Flow	0	0	292	0
13683.00	13723.00	Produce	0	0	292	0
13723.00	13992.00	Flow	0	0	293	0
13992.00	14028.00	Produce	0	0	293	0
14028.00	14278.00	Flow	0	0	293	0
14278.00	14327.00	Produce	0	0	293	0
14327.00	14770.00	Flow	0	0	293	0
14770.00	14824.00	Produce	0	0	293	26.3
14824.00	14895.00	Flow	0	0	267	0
14895.00	14949.00	Produce	0	0	267	.0176
14949.00	15258.00	Flow	0	0	267	0
15258.00	15334.00	Produce	0	0	267	0
15334.00	15562.00	Flow	0	0	267	0
15562.00	15611.00	Produce	0	0	267	.0101
15611.00	15969.00	Flow	0	0	267	0
15969.00	16005.00	Produce	0	0	267	7.45
16005.00	16465.00	Flow	0	0	259	0
16465.00	16497.00	Produce	0	0	259	24.0
16497.00	16575.00	Flow	0	0	235	0
16575.00	16602.00	Produce	0	0	235	36.5
16602.00	16676.00	Flow	0	0	199	0
16676.00	16689.00	Produce	0	0	199	199
16689.00	16850.00	WellBottom	0	0	0	0
16850.00	Bottom	WellBottom	ABSENT	ABSENT	ABSENT	ABSENT

To judge on the agreement of the flow model with the data, the figure below is provided.

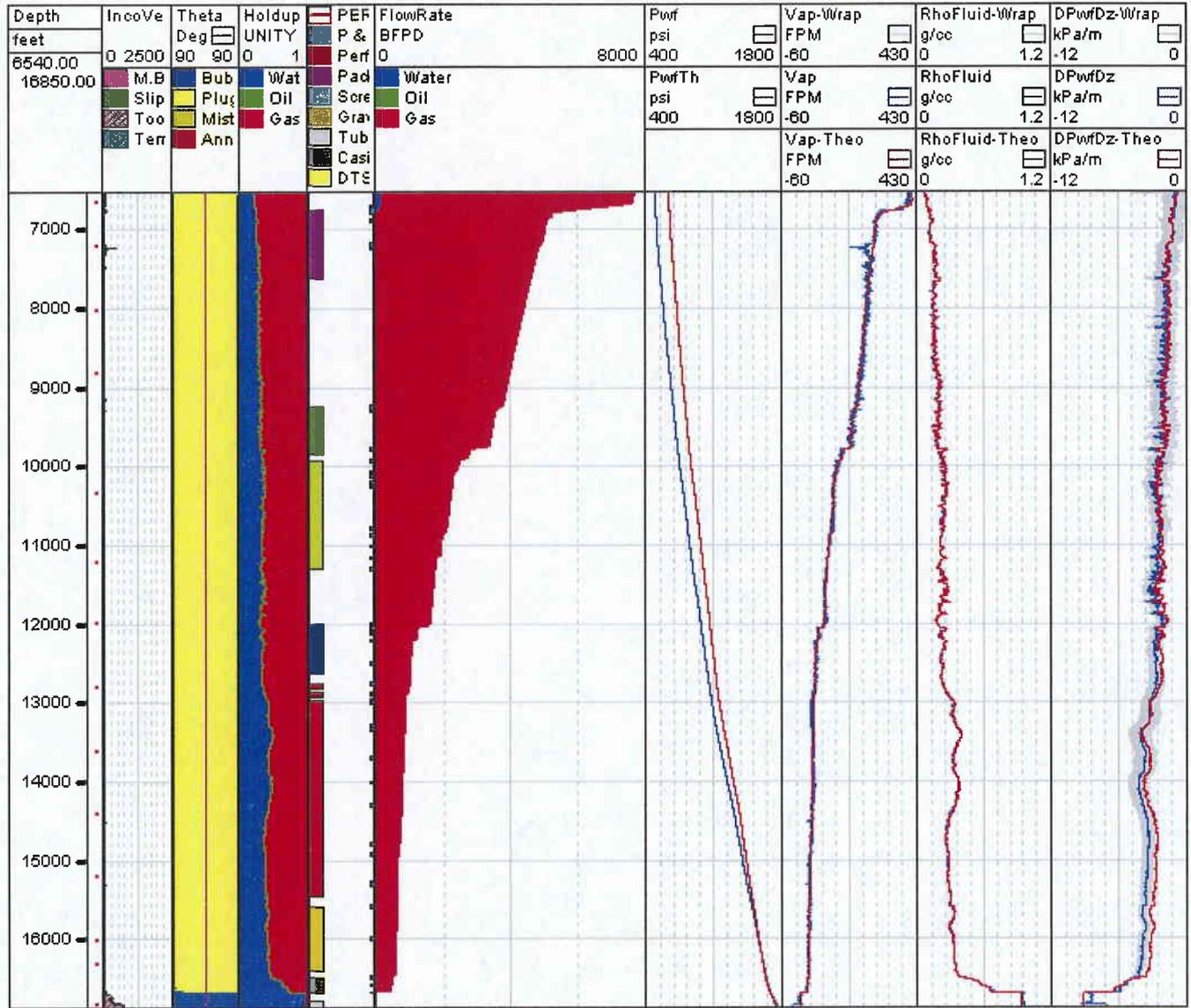
In this figure the data is represented by the blue curves, while the calculated tool values are shown in red. The uncertainty interval is represented as a gray band around the data. It corresponds to one standard deviation.

The small fluctuations around the data are to be expected, since the tools have intrinsic errors. Large sustained discrepancies indicate problems with the data, conflicts between parameters or conditions that make the underlying empirical models less applicable.

The first curve to the left is the incoherence or total deviation for the depth. This incoherence includes the constraint terms for each tool, the slip velocities, material balance and surface production rates in the upper zone.

The third curve from the left shows the flow regimes. Within the transition zones several regimes can exist intermittently.

The fourth curve from the left is the holdup or relative effective cross section of the pipe used by each phase. The fifth curve from the left shows the perforations and production intervals. To differentiate adjacent producing (injecting) zones, incremental values are used for the ProfileFlag. The sixth curve from the left shows the flow rate fractions of each phase at Well conditions.



Computation of production rates at surface conditions

The production rates at surface conditions are summarized below.

Depth		Profile	Qp-Water-STP	Qp-Gas-STP
feet			BFPD	MCFD
Surface	6540.00	Flow	0	0
6540.00	6688.00	Flow	0	0
6688.00	6800.00	Produce	150	353
6800.00	6856.00	Flow	0	0
6856.00	6895.00	Produce	0	18.0
6895.00	7163.00	Flow	0	0
7163.00	7250.00	Produce	0	16.1
7250.00	9229.00	Flow	0	0
9229.00	9305.00	Produce	0	44.6
9305.00	9758.00	Flow	0	0
9758.00	9797.00	Produce	0	131
9797.00	9900.00	Flow	0	0
9900.00	9939.00	Produce	0	60.6
9939.00	10051.00	Flow	0	0
10051.00	10079.00	Produce	0	21.8
10079.00	10102.00	Flow	0	0
10102.00	10132.00	Produce	0	4.40
10132.00	10183.00	Flow	0	0
10183.00	10219.00	Produce	0	0
10219.00	10244.00	Flow	0	0
10244.00	10280.00	Produce	0	0
10280.00	10770.00	Flow	0	0
10770.00	10800.00	Produce	0	8.35
10800.00	10842.00	Flow	0	0
10842.00	10881.00	Produce	0	26.8
10881.00	10993.00	Flow	0	0
10993.00	11024.00	Produce	0	.848
11024.00	11139.00	Flow	0	0
11139.00	11175.00	Produce	0	31.6
11175.00	11273.00	Flow	0	0
11273.00	11323.00	Produce	0	.0224
11323.00	11989.00	Flow	0	0
11989.00	12016.00	Produce	0	17.0
12016.00	12033.00	Flow	0	0
12033.00	12061.00	Produce	0	93.7
12061.00	12098.00	Flow	0	0
12098.00	12134.00	Produce	0	0

# SMOLEN ASSOCIATES

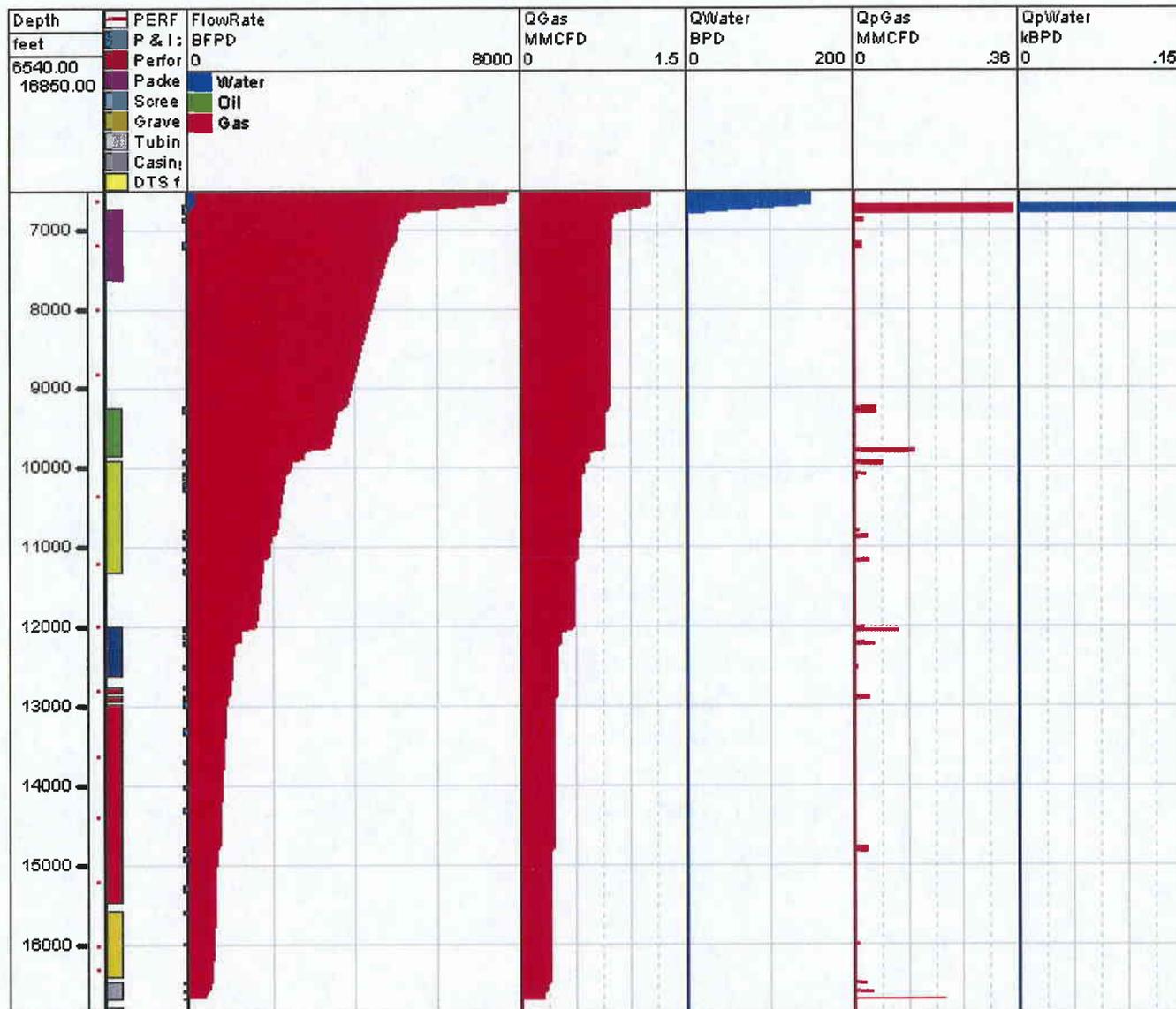
17/19

12134.00	12195.00	Flow	0	0
12195.00	12226.00	Produce	0	42.3
12226.00	12481.00	Flow	0	0
12481.00	12520.00	Produce	0	3.50
12520.00	12735.00	Flow	0	0
12735.00	12785.00	Produce	0	.0217
12785.00	12866.00	Flow	0	0
12866.00	12908.00	Produce	0	28.9
12908.00	12941.00	Flow	0	0
12941.00	13008.00	Produce	0	0
13008.00	13281.00	Flow	0	0
13281.00	13348.00	Produce	0	0

Depth		Profile	Qp-Water-STP	Qp-Gas-STP
feet			BFPD	MCFD
13348.00	13683.00	Flow	0	0
13683.00	13723.00	Produce	0	0
13723.00	13992.00	Flow	0	0
13992.00	14028.00	Produce	0	0
14028.00	14278.00	Flow	0	0
14278.00	14327.00	Produce	0	0
14327.00	14770.00	Flow	0	0
14770.00	14824.00	Produce	0	26.3
14824.00	14895.00	Flow	0	0
14895.00	14949.00	Produce	0	.0176
14949.00	15258.00	Flow	0	0
15258.00	15334.00	Produce	0	0
15334.00	15562.00	Flow	0	0
15562.00	15611.00	Produce	0	.0101
15611.00	15969.00	Flow	0	0
15969.00	16005.00	Produce	0	7.45
16005.00	16465.00	Flow	0	0
16465.00	16497.00	Produce	0	24.0
16497.00	16575.00	Flow	0	0
16575.00	16602.00	Produce	0	36.5
16602.00	16676.00	Flow	0	0
16676.00	16689.00	Produce	0	199
16689.00	16850.00	WellBottom	0	0
16850.00	Bottom	WellBottom	ABSENT	ABSENT

A graphical representation of the production profile is shown in the figure below. The curves QGas, QOil and QWater are the flow rates, for each depth, at surface conditions. The curves QpGas, QpOil and QpWater are the production rates at surface conditions.

Notice: These rates are the total amount produced in the zone.



## Conclusions

The following chart indicates which perfs show entries and, if possible, the type of fluid entering. The key used is gas=g, water=w, trace=tr. The fluid volumes specified are at surface conditions. MCFD=m, water=BWD. Comments may be added.

The following is a list of active perfs in this well.

### WASATCH

6758-60	353m + 150BWD
6878-80	18m
7234-36	16m

### MESA VERDE

9250-52	45m
9777-79	131m

### LOWER MESA VERDE

9916-18	61m
10062-64	22m
10109-11	4m
10776-78	8m
10854-56	27m
11149-51	32m
11303-05	tr gas

### BLACKHAWK

11997-98	17m
12042-44	94m
12205-06	40m
12488-89	4m

### MANCOS

12752-53	tr gas
----------	--------

### MANCOS B

12882-83	29m
----------	-----

### MANCOS

14802-03	26m
14907-09	tr gas

### FRONTIER

15576-78	tr gas
15980-82	7m

### DAKOTA SILT

16475-77	24m
16585-86	37m

### DAKOTA SS

16679-81	199m
----------	------

### DAKOTA C

No apparent production.

DIVISION OF OIL, GAS AND MINING  
**Wildcat Well Determination**  
**STATEMENT OF BASIS**

**Applicant:** QEP Uinta Basin, Inc.

**Location:** NWSE Sec. 14 T8S, R21E, Uintah County, Utah

**WELL NAME:** WV 11AD-14-8-21 **API #:** 43-047-38049

**FINDINGS**

1. This well was completed on June 5, 2008 in the Wasatch, Mesa Verde, Mancos, Frontier and Dakota formations.
2. This well was >1 mile from any known production in the Frontier and Dakota formations at the time of the completion and the start of commercial production. The Dakota formation is the deepest producing formation in this well.
3. This well is approximately 3436' from the WV 14M-11-8-21 that also produces from the Wasatch, Mesa Verde and Mancos formations.
4. A production log was run that attributed production in the following amounts for each formation: Wasatch 32%, Mesa Verde 27%, Blackhawk 13%, Mancos 5%, Frontier 1%, and Dakota 22%.

**CONCLUSIONS**

Based on the findings above the Division has determined the WV 11AD-14-8-21 well was drilled into an unknown area for the Frontier and Dakota formations. The Division finds that this well qualifies for the severance tax exemption under Section 59-5-102(2)(d) for wildcat wells for the **Frontier and Dakota** formation. The Division recommends the percent of production attributed to the above formations (23%) from the production log run on 12 September 2008 be used as the amount of production that qualifies for the wildcat tax credit. This determination was made in accordance with Oil and Gas General Conservation Rule R649-3-35. If the operator disagrees with this determination, the decision may be appealed to the Board of Oil Gas and Mining.

Reviewer(s): Dustin K. Doucet *DKD*

Date: Feb. 24, 2009

Joshua J. Payne

Date: 12 February 2009

CC: Utah State Tax Commission  
ATTN: Ken Petersen

## ATTACHMENT A

## 1 Mile Area of Review

API	WELL_NAME	Well Status	QTR	Sect	Town	Range	Cum Oil	Cum Gas	Field Type	Dx from Well(ft)	Rotary Spud	Date TD Reached	Date First Produced	Producing Formation
4304739044	WV 7BD-23-8-21	PGW	SWNE	23	080S	210E	915	96498	D	4013	5/6/2008		8/14/2008	Wasatch-Mesa Verde-Mancos-Frontier-Dakot
4304739041	WV 4BD-23-8-21	PGW	NWNW	23	080S	210E	0	40381	D	3821	8/3/2008		10/10/2008	Wasatch-Mesa Verde-Mancos-Frontier-Dakot
4304739040	WV 8D-15-8-21	PGW	SENE	15	080S	210E	26	26614	D	2988	7/20/2008		10/21/2008	Wasatch-Mesa Verde-Mancos-Frontier-Dakot
4304739038	WV 4B-14-8-21	APD	NWNW	14	080S	210E	0	0	D	3445				Dakota (proposed)
4304739037	WV 14B-13-8-21	APD	SESW	13	080S	210E	0	0	D	4330				Dakota (proposed)
4304738737	WV 16C-14-8-21	PGW	SESE	14	080S	210E	0	0	D	2982		12/11/2008		Wasatch-Mesa Verde-Mancos-Frontier-Dakot
4304738736	WV 3AML-14-8-21	LA	NENW	14	080S	210E	0	0	D	2589				
4304738734	WV 4DML-13-8-21	LA	NWNW	13	080S	210E	0	0	D	4172				
4304738050	WV 11DML-14-8-21	LA	SESW	14	080S	210E	0	0	D	1457				
4304738049	WV 11AD-14-8-21	PGW	NWSE	14	080S	210E	1126	200089	D	0		5/2/2008	6/5/2008	Wasatch-Mesa Verde-Mancos-Frontier-Dakot
4304737923	WV 3D-13-8-21	OPS	SENW	13	080S	210E	0	0	D	5240				Dakota (proposed)
4304734339	WV 8M-23-8-21	PGW	SENE	23	080S	210E	2021	271931	D	5020			9/20/2003	Wasatch-Mesa Verde
4304734330	WV 4W-24-8-21	PGW	NWNW	24	080S	210E	527	205202	D	4651			3/14/2002	Wasatch
4304734295	WV 10W-15-8-21	PGW	NWSE	15	080S	210E	785	208173	D	4544			1/8/2002	Wasatch
4304734283	WV 16G-14-8-21	SOW	SESE	14	080S	210E	3997	0	D	2823			5/4/2002	Green River
4304734282	WV 15W-11-8-21	LA	SWSE	11	080S	210E	0	0	D	3337				
4304734281	WV 14W-14-8-21	SGW	SESW	14	080S	210E	2684	299382	D	2035			4/8/2002	Wasatch
4304734279	WV 12W-14-8-21	SGW	NWSW	14	080S	210E	34	15026	D	1846			5/4/2002	Wasatch
4304734278	WV 12W-11-8-21	LA	NWSW	11	080S	210E	0	0	D	4987				
4304734277	WV 11W-14-8-21	PGW	NESW	14	080S	210E	1151	373504	D	1037			5/6/2002	Wasatch
4304734276	WV 11W-11-8-21	LA	NESW	11	080S	210E	0	0	D	4663				
4304734275	WV 10W-14-8-21	PGW	NWSE	14	080S	210E	1992	432371	D	998			3/22/2002	Wasatch
4304734274	WV 9W-11-8-21	OPS	NESE	11	080S	210E	0	0	D	5268				
4304734271	WV 6W-14-8-21	PGW	SENW	14	080S	210E	945	391148	D	827			2/26/2002	Wasatch
4304734251	WV 16W-15-8-21	PGW	SESE	15	080S	210E	845	252716	D	3933			3/23/2002	Wasatch
4304734250	WV 16W-10-8-21	PGW	SESE	10	080S	210E	1134	408758	D	4505			2/13/2002	Wasatch
4304734247	WV 8W-15-8-21	PGW	SENE	15	080S	210E	921	247202	D	3565			2/12/2002	Wasatch
4304734246	WV 7W-15-8-21	PGW	SWNE	15	080S	210E	557	189715	D	5027			2/4/2002	Wasatch
4304734244	WV 4W-14-8-21	PGW	NWNW	14	080S	210E	517	120723	D	2905			2/18/2002	Wasatch
4304734242	WV 2W-15-8-21	PGW	NWNE	15	080S	210E	472	255391	D	4986			1/30/2002	Wasatch
4304734189	WV 6W-23-8-21	PGW	SENW	23	080S	210E	608	197832	D	4506			12/8/2001	Wasatch
4304734188	WV 4W-23-8-21	PGW	NWNW	23	080S	210E	746	294156	D	3814			12/18/2001	Wasatch
4304734155	WV 16W-11-8-21	TA	SESE	11	080S	210E	460	2495	D	3761			5/29/2002	Wasatch
4304734144	WV 4W-13-8-21	PGW	NWNW	13	080S	210E	1096	387166	D	4250			11/5/2001	Wasatch
4304734142	WV 2W-23-8-21	PGW	NWNE	23	080S	210E	735	234845	D	3545			11/21/2001	Wasatch
4304734140	WV 2W-14-8-21	PGW	NWNE	14	080S	210E	739	352890	D	1928			12/17/2001	Wasatch
4304733963	WV 15W-14-8-21	PGW	SWSE	14	080S	210E	893	358740	D	2219			8/14/2001	Wasatch
4304733962	WV 14W-13-8-21	PGW	SESW	13	080S	210E	874	400068	D	4904			11/7/2001	Wasatch
4304733961	WV 12W-13-8-21	PGW	NWSW	13	080S	210E	934	444084	D	3324			10/30/2001	Wasatch
4304733959	WV 9W-15-8-21	PGW	NESE	15	080S	210E	1174	401277	D	3387			7/31/2001	Wasatch
4304733958	WV 8W-14-8-21	PGW	SENE	14	080S	210E	649	134367	D	2217			8/27/2001	Wasatch
4304733955	WV 7W-14-8-21	PGW	SWNE	14	080S	210E	1194	288081	D	787			8/26/2001	Wasatch
4304733953	WV 5W-14-8-21	PGW	SWNW	14	080S	210E	669	168280	D	2301			8/7/2001	Wasatch
4304733952	WV 3W-14-8-21	PA	NENW	14	080S	210E	0	0	D	2407				Wasatch
4304733917	WV 15W-15-8-21	PGW	SWSE	15	080S	210E	1129	456814	D	4949			7/3/2001	Wasatch
4304733913	WV 13W-11-8-21	SGW	SWSW	11	080S	210E	562	66836	D	4203			6/13/2001	Wasatch
4304733910	WV 10W-11-8-21	PGW	NWSE	11	080S	210E	346	68980	D	4672			8/7/2001	Wasatch
4304733904	WV 1W-23-8-21	PGW	NENE	23	080S	210E	1173	586703	D	3929			6/15/2001	Wasatch
4304733903	WV 1W-22-8-21	PGW	NENE	22	080S	210E	1215	506932	D	4513			4/30/2001	Wasatch
4304733902	WV 1W-15-8-21	SGW	NENE	15	080S	210E	1692	411385	D	3629			4/28/2001	Wasatch
4304733861	WV 7W-23-8-21	PGW	SWNE	23	080S	210E	733	154949	D	4645			6/25/2001	Wasatch
4304733860	WV 5W-23-8-21	PGW	SWNW	23	080S	210E	827	400339	D	4905			6/2/2001	Wasatch
4304733792	WV 6W-13-8-21	PGW	SENW	13	080S	210E	1985	666569	D	4738			3/2/2001	Wasatch
4304733607	WV 13W-14-8-21	PGW	SWSW	14	080S	210E	708	209557	D	2772			12/20/2000	Wasatch

4304733606	WV 13W-13-8-21	SGW	SWSW	13	080S	210E	529	214215	D	3716			11/29/2000	Wasatch
4304733603	WV 3W-13-8-21	SGW	NENW	13	080S	210E	2752	810414	D	5199			12/14/2000	Wasatch
4304733537	WV 13W-12-8-21	SGW	SWSW	12	080S	210E	836	223978	D	4715			10/2/2000	Wasatch
4304733536	WV 11W-13-8-21	PGW	NESW	13	080S	210E	915	316475	D	4593			11/1/2000	Wasatch
4304733269	WV 9W-14-8-21	PGW	NESE	14	080S	210E	648	218861	D	1998			11/29/2000	Wasatch
4304733221	WV 5W-13- 8-21	PGW	SWNW	13	080S	210E	1971	324352	D	3405			3/28/2000	Wasatch
4304733220	WV 1W-14- 8- 21	PGW	NENE	14	080S	210E	1850	685780	D	2758			5/10/2000	Wasatch
4304731873	WV 121	TA	NWSW	14	080S	210E	59907	2939	D	2035			11/2/1990	Green River
4304731809	WVU 101-2	PA	NWNW	13	080S	210E	46697	5085	D	4227			12/14/1987	Green River
4304731657	WVU 31-2	LA	NENW	14	080S	210E	0	0	D	2193				
4304731524	WV 28-2	WI	NESW	11	080S	210E	0	0	D	4670				Uinta
4304731049	WVU 84-2	PA	SWNW	23	080S	210E	1396	0	D	4850			2/4/1982	Green River
4304730745	WV 124	POW	NWSE	15	080S	210E	325084	39328	D	4603				
4304730744	WVU 123	LA	SESE	15	080S	210E	0	0	D	3925				
4304730743	WVU 122	LA	SWSW	14	080S	210E	0	0	D	2777				
4304730742	WVU 121	LA	NWSW	14	080S	210E	0	0	D	2045				
4304730741	WVU 120	LA	NWSE	14	080S	210E	0	0	D	999				
4304730195	WVU 116	PA	SESE	11	080S	210E	302916	51388	D	2982			4/11/1975	Green River
4304730144	WVU 115	PA	SESW	12	080S	210E	300768	90306	D	4824			11/25/1973	Green River
4304730050	WVU 114	PA	SESW	13	080S	210E	16161	2832	D	4963			6/20/1969	Green River
4304730047	WVU 111	PA	SENE	14	080S	210E	86444	74498	D	2089			6/10/1969	Green River
4304730046	WV 110	POW	SENE	14	080S	210E	418471	206328	D	977			6/12/1969	Green River
4304730045	WV 109	POW	SENE	15	080S	210E	763086	183092	D	3389			6/9/1969	Green River
4304730025	WVU 107	PA	NWSW	13	080S	210E	49712	14457	D	3328			8/10/1968	Green River
4304730024	WVU 106	PA	SENE	13	080S	210E	46196	48697	D	4706			8/2/1968	Green River
4304730023	WV 105	POW	SESE	10	080S	210E	571824	176366	D	4753			5/15/1968	Green River
4304730022	WV 104	POW	NWNE	15	080S	210E	616439	248779	D	5045			5/26/1968	Green River
4304730021	WV 103	POW	NWNW	14	080S	210E	674460	280330	D	2820			6/7/1968	Green River
4304730020	WVU 102	PA	NWNE	14	080S	210E	251395	112217	D	2225			6/19/1968	Green River
4304730019	WVU 101	PA	NWNW	13	080S	210E	313179	135759	D	4270			6/26/1968	Green River
4304730015	WVU 98	PA	SESW	11	080S	210E	625690	200997	D	3460			4/30/1968	Green River
4304730014	WV 97	WI	NWSW	11	080S	210E	55539	39167	D	5160			4/20/1968	Green River
4304730009	WVU 94	PA	NWSE	11	080S	210E	348118	101015	D	4730			3/30/1968	Green River
4304730008	WVU 93	PA	SESE	11	080S	210E	120656	39856	D	3801			3/25/1968	Green River
4304720223	WVU 84	PA	SWNW	23	080S	210E	197331	98571	D	4943			5/22/1967	Green River
4304720205	WV 83 WG	PGW	NENW	23	080S	210E	337673	763710	D	3283			4/4/1967	Green River
4304720181	WVU 80	PA	NENE	23	080S	210E	686918	212865	D	3897			2/11/1967	Green River
4304720180	WVU 79	PA	SWNE	23	080S	210E	24789	153575	D	4656			2/14/1967	Green River
4304720047	WV 68	WI	NESE	15	080S	210E	230405	146393	D	3423			4/15/1966	Green River
4304720042	WVU 66	PA	SWSE	14	080S	210E	885550	596592	D	2072			4/3/1966	Green River
4304720019	WV 60	WI	SWSE	15	080S	210E	204109	130782	D	5100			5/5/1966	Green River
4304720018	WV 59	WI	SWNW	14	080S	210E	287509	141572	D	2132			3/24/1966	Green River
4304720017	WVU 58	PA	SWSW	13	080S	210E	745107	670186	D	3750			2/21/1966	Green River
4304720005	WV 55	POW	SWNE	14	080S	210E	301924	165819	D	934			3/4/1966	Green River
4304715478	WVU 51	PA	NESW	13	080S	210E	686648	663786	D	4634			2/5/1966	Green River
4304715477	WV 50	WI	SWNE	15	080S	210E	221174	167212	D	4697			2/4/1966	Green River
4304715475	WVU 47	PA	SWNW	13	080S	210E	100197	133749	D	3404			1/25/1966	Green River
4304715472	WVU 44	PA	NENE	14	080S	210E	349350	230604	D	2765			1/13/1966	Green River
4304715471	WV 43	POW	SWSW	11	080S	210E	472083	238259	D	3994			12/13/1966	Green River
4304715470	WVU 42	PA	SWSE	11	080S	210E	404597	339761	D	3387			10/28/1965	Green River
4304715463	WV 35	WI	NESW	14	080S	210E	268723	97821	D	893			7/31/1965	Green River
4304715460	WV 31	WI	NENW	14	080S	210E	538900	381396	D	2213			5/31/1964	Green River
4304715458	WVU 29	PA	NENW	13	080S	210E	874304	541785	D	5150			4/17/1964	Green River
4304715457	WVU 28	PA	NESW	11	080S	210E	380674	258723	D	4688			3/30/1964	Green River
4304715449	WVU 18	PA	NESE	14	080S	210E	345794	442608	D	2039			12/6/1963	Green River
4304715448	WVU 17	PA	SWSW	12	080S	210E	1132846	843364	D	4703			11/30/1963	Green River
4304715447	WV 16	WI	NENE	15	080S	210E	387626	453528	D	3836			10/16/1963	Green River
4304715444	WVU 13	PA	NESE	11	080S	210E	1224194	617317	D	4993			9/26/1963	Green River

43-047-38049

14 8s 21e

CONFIDENTIAL

QUESTAR

Page 1 of 3

## Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: COMPLETION  
 Contractor Name:  
 Rig Name:

Start: 5/31/2008  
 Rig Release:  
 Rig Number:

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/23/2008	10:00 - 15:00	5.00	LOG	2	C-LOG	MIRU LONE WOLF ELU. MU AND RIH WITH CCL/GR/CBL/VDL LOGGING TOOLS. TAG PBTD AT 16,867'. PULL 300' STRIP TO CORRELATE TO SLB OH LOG DATED 5/3/08. LOG FROM PBTD TO 4,000' WITH 4,000 PSI. EST. TOC AT 4,550'. BHT 300*.
5/30/2008	07:00 - 15:00	8.00	LOC	5	C-PRE	MIRU IPS FBE & FRAC EQUIPMENT. PRESSURE TEST CSG TO 10,000 PSI & PRESSURE TEST ANNULUS TO 3,000 PSI. BOTH TEST GOOD.
5/31/2008	06:00 - 08:00	2.00	LOC	5	C-PRE	MIRU HES & OWP ELU.
	08:00 - 10:30	2.50	PERF	2	C-PERF	PERF STG #1 WITH 1- 1', 7- 2' GUN LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE WITH 1,000 PSI. SHOOT 45 HOLES FROM 16,793' TO 16,850'.
6/1/2008	10:30 - 12:00	1.50	STIM	3	C-STIM	FRAC STAGE #1 WITH 709 BBLS DELTA X-LINK CARRYING 37,882 LBS# 20/40 SINTERLITE SAND. AVG RATE= 37.9 BPM. AVG PSI= 10,726. SCREENED OUT, PLACING 18,766 LBS IN FORMATION.
	12:00 - 14:15	2.25	PTST	2	C-OTH	FLOW BACK 250 BBLS TO CLEAN UP WELLBORE. LOAD HOLE PUMPING 211 BBLS SLICKWATER AT 7.0 BPM AND PRESSURED OUT.
	14:15 - 17:15	3.00	PERF	2	C-PERF	PERF STG #2. RIH WITH PLUG & GUNS, SET DOWN @ 16,233'. POOH WITH PLUG & GUNS.
	17:15 - 21:30	4.25	PTST	2	C-OTH	FLOW BACK 235 BBLS TO CLEAN UP WELLBORE. LOAD HOLE PUMPING 178 BBLS SLICKWATER AT 17.0 BPM AND PRESSURED OUT.
	21:30 - 06:00	8.50	PTST	2	C-STIM	FLOW BACK OVERNIGHT TO TRY AND CLEAN UP. WILL ATTEMPT TO LOAD CSG AT 06:00.
	06:00 - 06:30	0.50	STIM	3	C-STIM	SHUT DOWN FLOW BACK. ATTEMPT TO LOAD HOLE. PRESSURED OUT WITH 23 BBLS PUMPED @ 9.0 BPM.
	06:30 - 22:00	15.50	DRL	6	C-STIM	RDMO OWP ELU. MIRU IPS CTU. MU QES 2 7/8 MOTOR/JARS & 3.55" 5-BLADE JUNK MILL. TEST STACK TO 8,000 PSI. RIH AND CLEAN OUT CSG TO PBTD AT 16,872' (FC DEPTH 16,872'). PUMP FINAL 10 BBLS SWEEP AND POOH. RDMO IPS CTU.
6/2/2008	06:00 - 10:00	4.00	PERF	2	C-PERF	MIRU OWP ELU. PERF STG #2 WITH 6- 2' & 2- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CBP @ 16,720' WITH 4,000 PSI. SHOOT 42 HOLES FROM 16,205' TO 16,681'.
	10:00 - 12:45	2.75	OTH		C-OTH	HCR VALVE FAILED DURING PRESSURE TEST. ND HCR VALVE & NU NEW HCR VALVE.
	12:45 - 14:30	1.75	STIM	3	C-STIM	FRAC STAGE #2 WITH 800 GAL. 15% HCL AT 10 BPM, 2,792 BBLS SLICKWATER CARRYING 38,953 LBS# 30/60 SINTERLITE SAND. AVG RATE= 34.6 BPM. AVG PSI= 10,206.
	14:30 - 17:30	3.00	PERF	2	C-PERF	PERF STG #3 WITH 5- 2' & 4- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 16,110' WITH 8,300 PSI. SHOOT 42 HOLES FROM 15,576' TO 16,086'.
	17:30 - 19:00	1.50	STIM	3	C-STIM	FRAC STAGE #3 WITH 800 GAL. 15% HCL AT 10 BPM, 2,399 BBLS SLICKWATER CARRYING 39,162 LBS# 30/60 SINTERLITE SAND. AVG RATE= 37.4 BPM. AVG PSI= 11,107.
6/3/2008	19:00 - 22:00	3.00	PERF	2	C-PERF	PERF STG #4 WITH 6- 2' & 2- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 15,490' WITH 8,400 PSI. SHOOT 42 HOLES FROM 14,907' TO 15,465'.
	06:00 - 07:15	1.25	STIM	3	C-STIM	FRAC STAGE #4 WITH 800 GAL. 15% HCL AT 10 BPM, 2,405 BBLS SLICKWATER CARRYING 40,812 LBS# 30/60 SINTERLITE SAND. AVG RATE= 40.1 BPM. AVG PSI= 10,469.
	07:15 - 10:00	2.75	PERF	2	C-PERF	PERF STG #5 WITH 5- 2' & 4- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 14,819' WITH 8,100 PSI. SHOOT 42

RECEIVED

JUL 08 2008

Printed: 7/1/2008 10:42:10 AM

Operations Summary Report

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: COMPLETION  
 Contractor Name:  
 Rig Name:

Start: 5/31/2008  
 Rig Release:  
 Rig Number:  
 Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
6/3/2008	07:15 - 10:00	2.75	PERF	2	C-PERF	HOLES FROM 14,101' TO 14,803'. FRAC STAGE #5 WITH 800 GAL. 15% HCL AT 10 BPM, 2,344 BBLS SLICKWATER CARRYING 40,668 LBS# 30/60 SINTERLITE SAND. AVG RATE= 41.2 BPM. AVG PSI= 9,657.
	10:00 - 11:45	1.75	STIM	3	C-STIM	
	11:45 - 14:00	2.25	PERF	2	C-PERF	PERF STG #6 WITH 6- 2' & 2- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 14,020' WITH 7,500 PSI. SHOOT 42 HOLES FROM 13,400' TO 13,998'.
	14:00 - 15:15	1.25	STIM	3	C-STIM	FRAC STAGE #6 WITH 800 GAL. 15% HCL AT 10 BPM, 2,630 BBLS SLICKWATER CARRYING 40,389 LBS# 30/60 SINTERLITE SAND. AVG RATE= 40.8 BPM. AVG PSI= 9,627.
	15:15 - 17:30	2.25	PERF	2	C-PERF	PERF STG #7 WITH 2- 2' & 10- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 13,320' WITH 7,000 PSI. SHOOT 42 HOLES FROM 12,752' TO 13,288'.
	17:30 - 18:40	1.17	STIM	3	C-STIM	FRAC STAGE #7 WITH 800 GAL. 15% HCL AT 10 BPM, 2,382 BBLS SLICKWATER CARRYING 45,147 LBS# 30/60 SINTERLITE SAND. AVG RATE= 46.7 BPM. AVG PSI= 8,565.
6/4/2008	18:40 - 20:45	2.08	PERF	2	C-PERF	PERF STG #8 WITH 5- 2' & 4- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 12,635' WITH 6,000 PSI. SHOOT 42 HOLES FROM 11,997' TO 12,620'.
	06:00 - 07:15	1.25	STIM	3	C-STIM	FRAC STAGE #8 WITH 800 GAL. 15% HCL AT 10 BPM, 2,585 BBLS SLICKWATER CARRYING 60,383 LBS# 30/50 SINTERLITE SAND. AVG RATE= 45.9 BPM. AVG PSI= 7,014.
	07:15 - 09:00	1.75	PERF	2	C-PERF	PERF STG #9 WITH 6- 2' & 2- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CBP @ 11,320' WITH 5,100 PSI. SHOOT 42 HOLES FROM 10,776' TO 11,305'.
	09:00 - 10:00	1.00	STIM	3	C-STIM	FRAC STAGE #9 WITH 800 GAL. 15% HCL AT 10 BPM, 2,078 BBLS SLICKWATER CARRYING 52,054 LBS# 30/50 SINTERLITE SAND. AVG RATE= 45.5 BPM. AVG PSI= 6,833.
	10:00 - 12:00	2.00	PERF	2	C-PERF	PERF STG #10 WITH 5- 2' & 4- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 10,280' WITH 3,800 PSI. SHOOT 42 HOLES FROM 9,916' TO 10,257'.
	12:00 - 13:30	1.50	STIM	3	C-STIM	FRAC STAGE #10 WITH 800 GAL. 15% HCL AT 10 BPM, 3,128 BBLS SLICKWATER CARRYING 80,662 LBS# 30/50 SINTERLITE SAND. AVG RATE= 45.0 BPM. AVG PSI= 5,506.
	13:30 - 15:00	1.50	PERF	2	C-PERF	PERF STG #11 WITH 4- 2' & 5- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 9,870' WITH 3,200 PSI. SHOOT 42 HOLES FROM 9,250' TO 9,847'.
	15:00 - 16:15	1.25	STIM	3	C-STIM	FRAC STAGE #11 WITH 800 GAL. 15% HCL AT 10 BPM, 2,346 BBLS SLICKWATER CARRYING 60,652 LBS# 30/50 SINTERLITE SAND. AVG RATE= 45.0 BPM. AVG PSI= 4,834.
	16:15 - 17:30	1.25	PERF	2	C-PERF	PERF STG #12 WITH 5- 2' & 3- 1' GUNS LOADED 3 SPF, 120* PHASE, 11 GRAM CHARGE. SET CFP @ 7,635' WITH 3,100 PSI. SHOOT 39 HOLES FROM 6,758' TO 7,622'.
	17:30 - 19:00	1.50	STIM	3	C-STIM	FRAC STAGE #12 WITH 800 GAL. 15% HCL AT 10 BPM, 848 BBLS DELTA 200 CARRYING 67,609 LBS# 30/50 SINTERLITE SAND. AVG RATE= 45.7 BPM. AVG PSI= 4,338. RDMO HES & OWP ELU.
6/5/2008	06:00 - 22:00	16.00	DRL	6	C-STIM	MIRU IPS CTU, GCDOE AND SPIRIT FLUIDS. LOAD CT WITH 70* WATER. MU QES 2 7/8" MOTOR/JARS WITH 3.55" 5-BLADE JUNK MILL. TEST STACK TO 8,000 PSI. RIH AND DRILL OUT 11 PLUGS IN 8 HOURS. TAG PBSD AT 16,872'. PUMP FINAL 10 BBLS SWEEP AND POOH. RDMO IPS CTU,GCDOE & SPIRIT FLUIDS. FLOWING TO SALES THRU IPS FBE.

**Operations Summary Report**

Legal Well Name: WV 11AD-14-8-21  
 Common Well Name: WV 11AD-14-8-21  
 Event Name: COMPLETION  
 Contractor Name:  
 Rig Name:

Start: 5/31/2008  
 Rig Release:  
 Rig Number:

Spud Date: 2/5/2008  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
6/6/2008	06:00 - 06:00	24.00	DRL	6	C-STIM	FLOWING TO SALES THRU IPS FBE.
6/7/2008	06:00 - 06:00	24.00	DRL	6	C-STIM	FLOWING TO SALES THRU IPS FBE.
6/8/2008	06:00 - 06:00	24.00	DRL	6	C-STIM	FLOWING TO SALES THRU IPS FBE.
6/9/2008	06:00 - 06:00	24.00	DRL	6	C-STIM	RDMO IPS FBE. FLOWING TO SALES THRU PRODUCTION EQUIPMENT.
6/20/2008	06:00 - 06:00	24.00	PTST	2	C-STIM	MIRU IPS FBE. FLOWING TO SALES THRU IPS FBE.
6/21/2008	06:00 - 06:00	24.00	PTST	2	C-STIM	FLOWING TO SALES THRU IPS FBE.
6/22/2008	06:00 - 06:00	24.00	PTST	2	C-STIM	FLOWING TO SALES THRU IPS FBE.
6/23/2008	06:00 - 06:00	24.00	PTST	2	C-STIM	FLOWING TO SALES THRU IPS FBE.
6/24/2008	06:00 - 06:00	24.00	PTST	2	C-STIM	RDMO IPS FBE. FLOWING TO SALES THRU PRODUCTION EQUIPMENT.

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**SUBMIT IN DUPLICATE**  
(See other instructions on reverse side).

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

**CONFIDENTIAL**

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG \***

1a. TYPE OF WELL  
 OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

b. TYPE OF COMPLETION  
 NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR  Other \_\_\_\_\_

2. NAME OF OPERATOR  
**QUESTAR EXPLORATION & PRODUCTION CO.**

3. ADDRESS OF OPERATOR  
**11002 E. 17500 S. VERNAL, UT 84078-8526**  
**DAHN CALDWELL**  
**435-781-4342**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
 At surface **2601' FSL, 2611' FEL, NWSE, SEC 14-T8S-R21E**  
 At top rod. interval reported below **2601' FSL, 2611' FEL, NWSE, SEC 14-T8S-R21E**  
 At total depth **2601' FSL, 2611' FEL, NWSE, SEC 14-T8S-R21E**

14. PERMIT NO. **43-047-38049** DATE ISSUED \_\_\_\_\_

12. COUNTY OR PARISH **UINTAH** 13. STATE **UT**

15. DATE SPUNDED **11/17/07** 16. DATE T.D. REACHED **5/2/08** 17. DATE COMPL. (Ready to prod.) **6/5/08**

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* **KB** 19. ELEV. CASINGHEAD \_\_\_\_\_

20. TOTAL DEPTH, MD & TVD **16,874'** 21. PLUG BACK T.D., MD & TVD **16,872'** 22. IF MULTIPLE COMPL., HOW MANY\* \_\_\_\_\_

23. INTERVALS DRILLED BY \_\_\_\_\_ ROTARY TOOLS **X** CABLE TOOLS \_\_\_\_\_

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\*  
**SEE ATTACHMENT ONE**

25. WAS DIRECTIONAL SURVEY MADE  
**YES No per oper**

26. TYPE ELECTRIC AND OTHER LOGS RUN  
**CBL/GR/CCL, THREE DETECTOR LITHODENSITY/GR, ARRAY INDUCTION TOOL, COMP NEUTRON - NEUTRON POROSITY/GR. DST. Pex, Bcs**

27. WAS WELL CORED  
**NO**

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	502'	17-1/2"	500 SXS	
9-5/8"	47#	5350'	12-1/4"	2,610 SXS	
7"	26#/29#	11,970'	8-1/2"	1,400 SXS	
4-1/2"	16.6#	16,873'	6-1/8"	735 SXS	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
N/A				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A		

31. PERFORATION RECORD (Interval, size and number)  
**SEE ATTACHMENT ONE**

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
<b>SEE ATTACHMENT ONE</b>	<b>SEE ATTACHMENT ONE</b>

33.\* PRODUCTION

DATE FIRST PRODUCTION **6/5/08** PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) **FLOWING** WELL STATUS (Producing or shut-in) **PRODUCING**

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO
<b>6/9/08</b>	<b>24</b>	<b>24</b>	<b>→</b>	<b>30</b>	<b>3,131</b>	<b>1,395</b>	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS-MCF	WATER-BBL.	OIL GRAVITY API (CORR.)
<b>N/A</b>	<b>2,325</b>	<b>→</b>				<b>RECEIVED</b>

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) **SOLD** TEST WITNESSED BY **SEP 15 2008**

35. LIST OF ATTACHMENTS  
**PERFORATION DETAIL ATTACHMENT ONE**

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

SIGNED **JIM SIMONTON** TITLE **COMPLETION SUPERVISOR** DATE **9/10/08**

(See Instructions and Spaces for Additional Data on Reverse Side)

**CONFIDENTIAL**

DIV. OF OIL, GAS & MINERAL RESOURCES

37. SUMMARY OF POROUS ZONES: (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):

38. GEOLOGIC MARKERS  
WV 11AD 14 8 21

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
WASATCH	6037'			WASATCH	6037'		
MESA VERDE	9068'			MESA VERDE	9068'		
CASTLE GATE	11587'			CASTLE GATE	11587'		
BLACK HAWK	11950'			BLACK HAWK	11950'		
MANCOS 'B'	12410'			MANCOS	12410'		
FRONTIER	12852'			MANCOS 'B'	12852'		
DAKOTA SILT	15559'			FRONTIER	15559'		
DAKOTA	16464'			DAKOTA SILT	16464'		
TD	166678'			DAKOTA	166678'		
				TD			

CONFIDENTIAL

# WV 11AD 14 8 21 – Attachment One

## PERFORATION DETAIL:

Open Perfs	Stimulation					Perf Status
6758' – 6760'	Frac w/	67,609	Lbs in	35,616	Gals	Open – Wasatch
6878' – 6880'						Open – Wasatch
7234' – 7236'						Open – Wasatch
7360' – 7362'						Open – Wasatch
7411' – 7412'						Open – Wasatch
7557' – 7558'						Open – Wasatch
7607' – 7609'						Open – Wasatch
7621' – 7622'						Open – Wasatch
9250' – 9252'	Frac w/	60,652	Lbs in	98,532	Gals	Open – Mesa Verde
9323' – 9325'						Open – Mesa Verde
9428' – 9429'						Open – Mesa Verde
9455' – 9456'						Open – Mesa Verde
9538' – 9539'						Open – Mesa Verde
9558' – 9560'						Open – Mesa Verde
9672' – 9673'						Open – Mesa Verde
9777' – 9779'						Open – Mesa Verde
9830' – 9831'						Open – Mesa Verde
9846' – 9847'	Open – Mesa Verde					
9916' – 9918'	Frac w/	80,662	Lbs in	131,376	Gals	Open - LMV
9956' – 9957'						Open - LMV
9975' – 9976'						Open - LMV
10032' – 10033'						Open - LMV
10062' – 10064'						Open - LMV
10109' – 10111'						Open - LMV
10163' – 10165'						Open - LMV
10189' – 10190'						Open - LMV
10255' – 10257'	Open - LMV					
10776' – 10778'	Frac w/	52,054	Lbs in	87,276	Gals	Open - LMV
10854' – 10856'						Open - LMV
10934' – 10936'						Open - LMV
10957' – 10958'						Open - LMV
10996' – 10998'						Open - LMV
11015' – 11016'						Open - LMV
11149' – 11151'						Open - LMV
11303' – 11305'	Open - LMV					

**CONFIDENTIAL**

11997' - 11998'							Open - Blackhawk
12042' - 12044'							Open - Blackhawk
12048' - 12050'							Open - Blackhawk
12110' - 12112'							Open - Blackhawk
12205' - 12206'							Open - Blackhawk
12232' - 12233'	Frac w/	60,383	Lbs in	106,570	Gals		Open - Blackhawk
12272' - 12273'							Open - Blackhawk
12375' - 12376'							Open - Blackhawk
12488' - 12489'							Open - Blackhawk
12618' - 12620'							Open - Blackhawk
12752' - 12753'							Open - Mancos
12817' - 12818'							Open - Mancos
12856' - 12858'							Open - Mancos 'B'
12882' - 12883'							Open - Mancos 'B'
12920' - 12922'							Open - Mancos 'B'
12968' - 12969'	Frac w/	45,147	Lbs in	100,044	Gals		Open - Mancos
13013' - 13014'							Open - Mancos
13074' - 13075'							Open - Mancos
13100' - 13101'							Open - Mancos
13165' - 13166'							Open - Mancos
13239' - 13240'							Open - Mancos
13287' - 13288'							Open - Mancos
13400' - 13402'							Open - Mancos
13457' - 13458'							Open - Mancos
13530' - 13532'							Open - Mancos
13596' - 13597'	Frac w/	40,389	Lbs in	110,460	Gals		Open - Mancos
13698' - 13700'							Open - Mancos
13777' - 13778'							Open - Mancos
13877' - 13879'							Open - Mancos
13943' - 13944'							Open - Mancos
13996' - 13998'							Open - Mancos
14101' - 14103'							Open - Mancos
14194' - 14196'							Open - Mancos
14287' - 14289'							Open - Mancos
14392' - 14394'	Frac w/	40,668	Lbs in	98,448	Gals		Open - Mancos
14466' - 14467'							Open - Mancos
14581' - 14583'							Open - Mancos
14678' - 14679'							Open - Mancos
14783' - 14784'							Open - Mancos
14802' - 14803'							Open - Mancos

CONFIDENTIAL

14907' - 14909'						Open - Mancos
14934' - 14935'						Open - Mancos
15042' - 15044'						Open - Mancos
15080' - 15081'						Open - Mancos
15166' - 15168'	Frac w/	40,812	Lbs in	101,010	Gals	Open - Mancos
15268' - 15270'						Open - Mancos
15366' - 15368'						Open - Mancos
15463' - 15465'						Open - Mancos
15576' - 15578'						Open - Frontier
15632' - 15633'						Open - Frontier
15741' - 15743'						Open - Frontier
15801' - 15802'						Open - Frontier
15870' - 15872'	Frac w/	39,162	Lbs in	100,758	Gals	Open - Frontier
15917' - 15918'						Open - Frontier
15980' - 15982'						Open - Frontier
16026' - 16027'						Open - Frontier
16084' - 16086'						Open - Frontier
16205' - 16207'						Open - Frontier
16297' - 16299'						Open - Frontier
16398' - 16399'						Open - Frontier
16475' - 16477'						Open - Dakota Silt
16535' - 16537'	Frac w/	38,953	Lbs in	117,264	Gals	Open - Dakota Silt
16585' - 16586'						Open - Dakota Silt
16671' - 16673'						Open - Dakota Silt
16679' - 16681'						Open - Dakota SS
16793' - 16794'						Open - Dakota 'C'
16824' - 16826'						Open - Dakota 'C'
16829' - 16833'	Frac w/	37,882	Lbs in	29,778	Gals	Open - Dakota 'C'
16838' - 16842'						Open - Dakota 'C'
16846' - 16850'						Open - Dakota 'C'

CONFIDENTIAL

**ENTITY ACTION FORM**

Operator: Questar Exploration & Production Co Operator Account Number: N 5085  
 Address: 11002 East 17500 South  
city Vernal  
state UT zip 84078 Phone Number: (435) 781-4342

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304738049	WV 11AD-14-8-21		NWSE	14	08S	21E	Uintah
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
C	14864	17122				9/30/08	
Comments: 6/5/2008 completed WMMFD. Separate entity each for FRTR and DKTA.							<b>CONFIDENTIAL</b>

Well 2

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

Well 3

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

**ACTION CODES:**

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

Earlene Russell for DOGM

Name (Please Print)

*Earlene Russell*

Signature

Engineering Tech

9/30/2008

Title

Date

**RECEIVED**  
**SEP 30 2008**

**ENTITY ACTION FORM**

Operator: Questar Exploration and Production Co. Operator Account Number: N 5085  
 Address: 11002 E. 17500 S.  
 City: Vernal  
 State: UT Zip: 84078 Phone Number: (435) 781-4300-4342

**Well 1**

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304738049	WV 11AD-14-8-21	NWSE	14	080S	210E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
D	17122	17123			11/1/2007	
<b>Comments:</b>	WMMFD --- 1/29/2009					

F 72

**Well 2**

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304738049	WV 11AD-14-8-21	NWSE	14	080S	210E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
D	17122	17123			11/1/2007	
<b>Comments:</b>	WMMFD --- 1/29/2009					

DIC

**Well 3**

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739321	WV 13AD-8-8-22R(RIGSKID)	SWSW	08	080S	220E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
D	14864	17123			11/1/2007	
<b>Comments:</b>	WMMFD RECEIVED --- 1/29/2009					

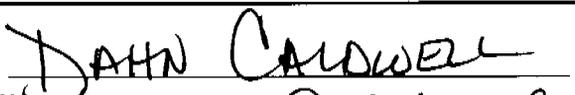
WMMFD

JAN 26 2009

**ACTION CODES:**

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

DIV. OF OIL, GAS & MINING (Please Print)

  
 Signature: Dawn Caldwell  
 Title: Office Admin Date: 1/20/09

**CONFIDENTIAL**

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

FORM 6

**ENTITY ACTION FORM**

Operator Questar Exploration and Production Co. Operator Account Number: N 5085  
 Address: 11002 E. 17500 S.  
City Vernal  
State UT Zip 84078 Phone Number: (435) 781-~~4300~~ 4342

Well 1

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739041	WV 4BD-23-8-21	NWNW	23	080S	210E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
D	16958	17123			11/1/2007	
Comments:	WMMFD --- 1/29/2009					

Well 2

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304739044	WV 7BD-23-8-21	SWNE	23	080S	210E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
D	16812	17123			11/1/2007	
Comments:	WMMFD --- 1/29/2009					

Well 3

API Number	Well Name	QQ	Sec	Twp	Rng	County
4304738049	WV 11AD-14-8-21	NWSE	14	080S	210E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date	
D	14864	17123			11/1/2007	
Comments:	WMMFD --- 1/29/2009					

**RECEIVED**

JAN 26 2009

**ACTION CODES:**

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

Name (Please Print)

Signature

Title

Date

DAWN CALDWELL  
Dawn Caldwell  
Office Admin 1/20/09

**CONFIDENTIAL**

**CONFIDENTIAL**  
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No. **UTU-0807**

6. If Indian, Allottee or Tribe Name  
**UTE TRIBE**

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

<p>1. Type of Well  <input type="checkbox"/> Oil Well    <input checked="" type="checkbox"/> Gas Well    <input type="checkbox"/> Other</p> <p>2. Name of Operator  <b>QUESTAR EXPLORATION &amp; PRODUCTION CO.</b>      CONTACT: Mike Stahl</p> <p>3a. Address          11002 EAST 17500 SOUTH, VERNAL, UTAH 84078</p> <p>3b. Phone No. (include area code)          (303) 308-3613</p> <p>4. Location of Well (Footage, Sec., T., R., M., or Survey Description)          2601' FSL 2611' FEL, NWSE, SECTION 14, T8S, R21E</p>	<p>7. If Unit of CA/Agreement, Name and/or No.  <b>WONSITS VALLEY UNIT</b></p> <p>8. Well Name and No.  <b>WV 11AD-14-8-21</b></p> <p>9. API Well No.  <b>43-047-38049</b></p> <p>10. Field and Pool or Exploratory Area  <b>WONSITS VALLEY</b></p> <p>11. Country or Parish, State  <b>UINTAH, UTAH</b></p>
--	--

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>COMMINGLING</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

In Compliance with the Administrative Utah code for drilling and operating practice R649-3-22, completion into two or more pools. Questar Exploration & Production Company hereby requests the commingling of production between intervals in the WV 11AD-14-8-21. Questar considers this commingling to be in the public interest in that it promotes maximum ultimate economic recovery, prevents waste, provides for orderly and efficient production of oil and gas and presents no detrimental effects from commingling the gas streams.

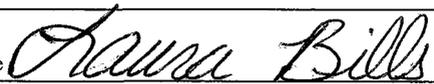
Questar requests approval for the commingling of production of the Dakota and Wasatch intervals. Based upon offset production logs, the proposed initial allocation is as follows: Dakota - 10% ; Mancos - 40% ; Mesa Verde - 30% ; Wasatch - 20%.

On an annual basis the gas will be sampled and a determination will be made of the BTU content and gas constituents. These annual samples can be used to determine if the gas allocation is changing over time. If these samples do not indicate that any adjustments in allocation are necessary they may be discontinued after the fifth anniversary of the initial production.

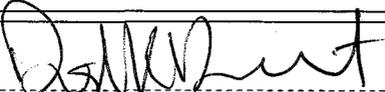
**COPY SENT TO OPERATOR**

Date: 4.14.2009

Initials: KS

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) <b>Laura Bills</b>	Title <b>Associate Regulatory Affairs Analyst</b>
Signature 	Date <b>03/12/2009</b>

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by 	Title <b>Pet. Eng.</b>	Date <b>4/13/09</b>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office <b>DOG</b>	Federal Approval Of This Action Is Necessary

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.

(Instructions on page 2)

**RECEIVED**

**MAR 16 2009**

DIV. OF OIL, GAS & MINING

**CONFIDENTIAL**

AFFIDAVIT OF NOTICE

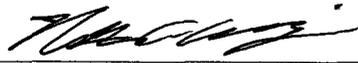
STATE OF COLORADO )  
 ) ss:  
COUNTY OF DENVER )

Nathan C. Koeniger, being duly sworn, deposes and says:

- 1. That I am employed by Questar Exploration and Production Company in the capacity as a Landman. My business address is:

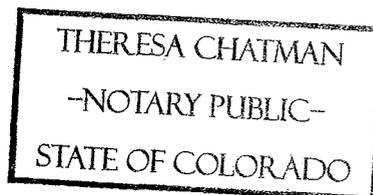
Independence Plaza  
1050 17<sup>th</sup> Street, Suite 500  
Denver, CO 80265

- 2. In my capacity as a Landman, pursuant to the provisions of Utah Administrative Rule 649-3-22, I have provided a copy of Questar Exploration and Production Company's application for completion of the WV 11AD-14-8-21 well into two or more pools, in the form of Utah Division of Oil, Gas and Mining's Form 9 Sundry Notice, to owners of all contiguous oil and gas leases or drilling units overlying the pools which are the subject of that application.
- 3. In my capacity as a Landman, I am authorized to provide such notice of Questar Exploration and Production Company's application to contiguous owners and to make this affidavit on this 4<sup>th</sup> day of March 2009.

  
Printed Name: Nathan C. Koeniger

The foregoing instrument was sworn to and subscribed before me this 4<sup>th</sup> day of March 2009, by Nathan C. Koeniger.

  
Notary Public



MY COMMISSION EXPIRES: 7/7/11



Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET** (for state use only)

**ROUTING**  
 CDW

Change of Operator (Well Sold)

**X - Operator Name Change**

The operator of the well(s) listed below has changed, effective:

**6/14/2010**

<b>FROM:</b> (Old Operator): N5085-Questar Exploration and Production Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 308-3048	<b>TO:</b> (New Operator): N3700-QEP Energy Company 1050 17th St, Suite 500 Denver, CO 80265  Phone: 1 (303) 308-3048
--	--

**CA No.**

**Unit:**

**WONSITS VALLEY**

WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
SEE ATTACHED								

**OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

- (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 6/28/2010
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 6/28/2010
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 6/24/2010
- Is the new operator registered in the State of Utah: Business Number: 764611-0143
- (R649-9-2) Waste Management Plan has been received on: Requested
- Inspections of LA PA state/fee well sites complete on: n/a
- Reports current for Production/Disposition & Sundries on: ok
- Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 8/16/2010 BIA not yet
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 8/16/2010
- Federal and Indian Communization Agreements ("CA"):**  
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A
- Underground Injection Control ("UIC")** Division has approved UIC Form 5 Transfer of Authority to **Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 6/29/2010

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 6/30/2010
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 6/30/2010
- Bond information entered in RBDMS on: 6/30/2010
- Fee/State wells attached to bond in RBDMS on: 6/30/2010
- Injection Projects to new operator in RBDMS on: 6/30/2010
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: ESB000024
- Indian well(s) covered by Bond Number: 965010693
- (R649-3-1) The **NEW** operator of any state/fee well(s) listed covered by Bond Number 965010695
- The **FORMER** operator has requested a release of liability from their bond on: n/a

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **NEW** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

**COMMENTS:**

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

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER: See attached
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached
7. UNIT or CA AGREEMENT NAME: See attached
8. WELL NAME and NUMBER: See attached
9. API NUMBER: Attached
10. FIELD AND POOL, OR WILDCAT: See attached

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER \_\_\_\_\_

2. NAME OF OPERATOR:  
Questar Exploration and Production Company *N5085*

3. ADDRESS OF OPERATOR:  
1050 17th Street, Suite 500 Denver, STATE CO ZIP 80265 PHONE NUMBER: (303) 672-6900

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: See attached

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

COUNTY: Attached  
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 (Submit in Duplicate) Approximate date work will start: <u>6/14/2010</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Operator Name Change</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

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

Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers:  
 Federal Bond Number: 965002976 (BLM Reference No. ESB000024) *N3700*  
 Utah State Bond Number: ~~965003033~~  
 Fee Land Bond Number: ~~965003033~~ } *965010695*  
 BIA Bond Number: ~~799446~~ } *965010693*

The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list

NAME (PLEASE PRINT) Morgan Anderson TITLE Regulatory Affairs Analyst  
 SIGNATURE *Morgan Anderson* DATE 6/23/2010

(This space for State use only)

**RECEIVED**  
**JUN 28 2010**  
DIV. OF OIL, GAS & MINING

**APPROVED** *6/13/2009*  
*Earlene Russell*  
Division of Oil, Gas and Mining  
Earlene Russell, Engineering Technician

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)

WONSITS VALLEY

effective June 14, 2010

well_name	sec	twp	rng	api	entity	mineral lease	type	stat	C
WV 43	11	080S	210E	4304715471	5265	Federal	OW	P	
WV 48	10	080S	210E	4304715476	5265	Federal	OW	P	
WV 53	10	080S	210E	4304720003	5265	Federal	OW	P	
WV 55	14	080S	210E	4304720005	5265	Federal	OW	P	
WV 62	10	080S	210E	4304720024	5265	Federal	OW	P	
WV 65	15	080S	210E	4304720041	5265	Federal	OW	P	
WV 83 WG	23	080S	210E	4304720205	17123	Federal	GW	P	
WV 103	14	080S	210E	4304730021	5265	Federal	OW	P	
WV 104	15	080S	210E	4304730022	5265	Federal	OW	P	
WV 105	10	080S	210E	4304730023	5265	Federal	OW	P	
WV 109	15	080S	210E	4304730045	5265	Federal	OW	P	
WV 110	14	080S	210E	4304730046	5265	Federal	OW	P	
WV 112	15	080S	210E	4304730048	5265	Federal	OW	P	
WV 124	15	080S	210E	4304730745	5265	Federal	OW	P	
WV 128	10	080S	210E	4304730798	5265	Federal	OW	P	
WV 132	15	080S	210E	4304730822	5265	Federal	OW	P	
WV 136	21	080S	210E	4304731047	5265	Federal	OW	S	
WV 137	11	080S	210E	4304731523	5265	Federal	OW	P	
WV 133	15	080S	210E	4304731706	5265	Federal	OW	P	
WV 144	10	080S	210E	4304731807	5265	Federal	OW	P	
WV 145	18	080S	220E	4304731820	17123	Federal	GW	P	
WV 121	14	080S	210E	4304731873	5265	Federal	OW	TA	
WV 135-2	21	080S	210E	4304732016	5265	Federal	OW	P	
WV 130	22	080S	210E	4304732307	5265	Federal	OW	P	
WV 119	21	080S	210E	4304732461	5265	Federal	OW	P	
WV 54 WG	07	080S	220E	4304732821	17123	Federal	GW	P	
WV 69 WG	18	080S	220E	4304732829	17123	Federal	GW	P	
WV 38 WG	08	080S	220E	4304732831	17123	Federal	GW	P	
WV 49 WG	08	080S	220E	4304732832	17123	Federal	GW	P	
WV 138 WG	18	080S	220E	4304733054	17123	Federal	GW	P	
WV 14 WG	12	080S	210E	4304733070	17123	Federal	GW	P	
WV 11 WG	12	080S	210E	4304733085	17123	Federal	GW	P	
WV 81 WG	24	080S	210E	4304733086	17123	Federal	GW	S	
WV 146 WG	19	080S	220E	4304733128	17123	Federal	GW	P	
WV 1W-14-8- 21	14	080S	210E	4304733220	17123	Federal	GW	P	
WV 5W-13- 8-21	13	080S	210E	4304733221	17123	Federal	GW	P	
WV 46 WG	07	080S	220E	4304733241	17123	Federal	GW	P	
WV 9W-14-8-21	14	080S	210E	4304733269	17123	Federal	GW	P	
WV 7W-13-8-21	13	080S	210E	4304733270	17123	Federal	GW	P	
WV 1W-18-8-22	18	080S	220E	4304733294	17123	Federal	GW	P	
WV 11W-8-8-22	08	080S	220E	4304733295	17123	Federal	GW	P	
WV 3W-8-8-22	08	080S	220E	4304733493	17123	Federal	GW	S	
WV 5W-7-8-22	07	080S	220E	4304733494	17123	Federal	GW	S	
WV 11W-7-8-22	07	080S	220E	4304733495	17123	Federal	GW	P	
WV 13W-7-8-22	07	080S	220E	4304733496	17123	Federal	GW	P	
WV 1W-7-8-22	07	080S	220E	4304733501	17123	Federal	GW	P	
WV 3W-7-8-22	07	080S	220E	4304733502	17123	Federal	GW	P	
WV 7WRG-7-8-22	07	080S	220E	4304733503	5265	Federal	OW	P	
WV 16W-9-8-21	09	080S	210E	4304733529	17123	Federal	GW	P	

Bonds: BLM = ESB000024

BIA = 956010693

State = 965010695

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
**WONSITS VALLEY**  
effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
WV 1W-12-8-21	12	080S	210E	4304733531	17123	Federal	GW	S	
WV 1W-13-8-21	13	080S	210E	4304733532	17123	Federal	GW	S	
WV 3W-18-8-22	18	080S	220E	4304733533	17123	Federal	GW	P	
WV 9W-12-8-21	12	080S	210E	4304733534	17123	Federal	GW	P	
WV 11W-12-8-21	12	080S	210E	4304733535	17123	Federal	GW	P	
WV 11W-13-8-21	13	080S	210E	4304733536	17123	Federal	GW	P	
WV 13W-12-8-21	12	080S	210E	4304733537	17123	Federal	GW	S	
WV 13W-18-8-22	18	080S	220E	4304733538	17123	Federal	GW	P	
WV 16G-9-8-21	09	080S	210E	4304733565	5265	Federal	OW	P	
WV 1W-21-8-21	21	080S	210E	4304733602	17123	Federal	GW	P	
WV 3W-13-8-21	13	080S	210E	4304733603	17123	Federal	GW	S	
WV 3W-22-8-21	22	080S	210E	4304733604	17123	Federal	GW	P	
WV 3W-24-8-21	24	080S	210E	4304733605	17123	Federal	GW	P	
WV 13W-14-8-21	14	080S	210E	4304733607	17123	Federal	GW	P	
WV 1W-24-8-21	24	080S	210E	4304733613	17123	Federal	GW	P	
WV 11W-18-8-22	18	080S	220E	4304733626	17123	Federal	GW	P	
WV 2W-10-8-21	10	080S	210E	4304733655	17123	Federal	GW	P	
WV 4W-11-8-21	11	080S	210E	4304733657	17123	Federal	GW	P	
WV 12W-10-8-21	10	080S	210E	4304733659	17123	Federal	GW	S	
WV 12G-10-8-21	10	080S	210E	4304733660	5265	Federal	OW	P	
WV 15W-9-8-21	09	080S	210E	4304733661	17123	Federal	GW	P	
WV 15G-9-8-21	09	080S	210E	4304733662	5265	Federal	OW	P	
WV 2W-13-8-21	13	080S	210E	4304733791	17123	Federal	GW	P	
WV 6W-13-8-21	13	080S	210E	4304733792	17123	Federal	GW	P	
WV 8W-13-8-21	13	080S	210E	4304733793	17123	Federal	GW	P	
WV 10W-1-8-21	01	080S	210E	4304733794	17123	Federal	GW	TA	
WV 10W-13-8-21	13	080S	210E	4304733795	17123	Federal	GW	P	
WV 12W-7-8-22	07	080S	220E	4304733808	17123	Federal	GW	P	
WV 6W-8-8-22	08	080S	220E	4304733811	17123	Federal	GW	P	
WV 7W-8-8-22	08	080S	220E	4304733812	17123	Federal	GW	P	
WV 10W-7-8-22	07	080S	220E	4304733813	17123	Federal	GW	P	
WV 12W-8-8-22	08	080S	220E	4304733815	17123	Federal	GW	P	
WV 14W-7-8-22	07	080S	220E	4304733816	17123	Federal	GW	P	
WV 16W-7-8-22	07	080S	220E	4304733817	17123	Federal	GW	P	
WV 6W-7-8-22	07	080S	220E	4304733828	17123	Federal	GW	P	
WV 6W-18-8-22	18	080S	220E	4304733842	17123	Federal	GW	P	
WV 6WC-18-8-22	18	080S	220E	4304733843	17123	Federal	GW	P	
WV 6WD-18-8-22	18	080S	220E	4304733844	17123	Federal	GW	P	
WV 5W-23-8-21	23	080S	210E	4304733860	17123	Federal	GW	P	
WV 7W-23-8-21	23	080S	210E	4304733861	17123	Federal	GW	P	
WV 8W-12-8-21	12	080S	210E	4304733862	17123	Federal	GW	P	
WV 10W-12-8-21	12	080S	210E	4304733863	17123	Federal	GW	P	
WV 14W-12-8-21	12	080S	210E	4304733864	17123	Federal	GW	P	
WV 16W-12-8-21	12	080S	210E	4304733865	17123	Federal	GW	P	
WV 1W-15-8-21	15	080S	210E	4304733902	17123	Federal	GW	S	
WV 1W-22-8-21	22	080S	210E	4304733903	17123	Federal	GW	S	
WV 1W-23-8-21	23	080S	210E	4304733904	17123	Federal	GW	P	
WV 6W-11-8-21	11	080S	210E	4304733906	17123	Federal	GW	P	
WV 7W-24-8-21	24	080S	210E	4304733908	17123	Federal	GW	P	

Bonds: BLM = ESB000024

BIA = 956010693

State = 965010695

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
WONSITS VALLEY  
effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
WV 10W-11-8-21	11	080S	210E	4304733910	17123	Federal	GW	P	
WV 11W-15-8-21	15	080S	210E	4304733911	17123	Federal	GW	P	
WV 13W-11-8-21	11	080S	210E	4304733913	17123	Federal	GW	S	
WV 13W-15-8-21	15	080S	210E	4304733914	17123	Federal	GW	P	
WV 15W-10-8-21	10	080S	210E	4304733916	17123	Federal	GW	P	
WV 15W-15-8-21	15	080S	210E	4304733917	17123	Federal	GW	P	
WV 5W-14-8-21	14	080S	210E	4304733953	17123	Federal	GW	P	
WV 7W-14-8-21	14	080S	210E	4304733955	17123	Federal	GW	P	
WV 8W-11-8-21	11	080S	210E	4304733957	17123	Federal	GW	S	
WV 8W-14-8-21	14	080S	210E	4304733958	17123	Federal	GW	P	
WV 9W-15-8-21	15	080S	210E	4304733959	17123	Federal	GW	P	
WV 12W-13-8-21	13	080S	210E	4304733961	17123	Federal	GW	P	
WV 14W-13-8-21	13	080S	210E	4304733962	17123	Federal	GW	P	
WV 15W-14-8-21	14	080S	210E	4304733963	17123	Federal	GW	P	
WV 2W-18-8-22	18	080S	220E	4304733986	17123	Federal	GW	P	
WV 8W-18-8-22	18	080S	220E	4304733989	17123	Federal	GW	P	
WV 10W-18-8-22	18	080S	220E	4304733991	17123	Federal	GW	P	
WV 12W-18-8-22	18	080S	220E	4304733993	17123	Federal	GW	S	
WV 14W-18-8-22	18	080S	220E	4304733995	17123	Federal	GW	P	
WV 8W-1-8-21	01	080S	210E	4304734009	17123	Federal	GW	OPS	C
WV 4W-17-8-22	17	080S	220E	4304734038	17123	Federal	GW	P	
WV 12G-1-8-21	01	080S	210E	4304734108	5265	Federal	OW	TA	
WV 2W-14-8-21	14	080S	210E	4304734140	17123	Federal	GW	P	
GH 2W-21-8-21	21	080S	210E	4304734141	17123	Federal	GW	P	
WV 2W-23-8-21	23	080S	210E	4304734142	17123	Federal	GW	P	
WV 3W-21-8-21	21	080S	210E	4304734143	17123	Federal	GW	P	
WV 4W-13-8-21	13	080S	210E	4304734144	17123	Federal	GW	P	
WV 4W-21-8-21	21	080S	210E	4304734145	17123	Federal	GW	P	
WV 4W-22-8-21	22	080S	210E	4304734146	17123	Federal	GW	P	
WV 16W-11-8-21	11	080S	210E	4304734155	5265	Federal	GW	P	
WV 3W-19-8-22	19	080S	220E	4304734187	17123	Federal	GW	P	
WV 4W-23-8-21	23	080S	210E	4304734188	17123	Federal	GW	P	
WV 6W-23-8-21	23	080S	210E	4304734189	17123	Federal	GW	S	
WV 2W-15-8-21	15	080S	210E	4304734242	17123	Federal	GW	P	
WV 2W-22-8-21	22	080S	210E	4304734243	17123	Federal	GW	P	
WV 4W-14-8-21	14	080S	210E	4304734244	17123	Federal	GW	S	
WV 6W-12-8-21	12	080S	210E	4304734245	5265	Federal	GW	TA	
WV 7W-15-8-21	15	080S	210E	4304734246	17123	Federal	GW	P	
WV 8W-15-8-21	15	080S	210E	4304734247	17123	Federal	GW	P	
WV 12W-12-8-21	12	080S	210E	4304734248	17123	Federal	GW	TA	
WV 14W-15-8-21	15	080S	210E	4304734249	17123	Federal	GW	P	
WV 16W-10-8-21	10	080S	210E	4304734250	17123	Federal	GW	P	
WV 16W-15-8-21	15	080S	210E	4304734251	17123	Federal	GW	P	
WV 3W-12-8-21	12	080S	210E	4304734267	17123	Federal	GW	OPS	C
WV 4D-12-8-21	12	080S	210E	4304734268	17123	Federal	GW	OPS	C
WV 6W-14-8-21	14	080S	210E	4304734271	17123	Federal	GW	S	
WV 9W-11-8-21	11	080S	210E	4304734274	17123	Federal	GW	OPS	C
WV 10W-14-8-21	14	080S	210E	4304734275	17123	Federal	GW	P	
WV 11W-14-8-21	14	080S	210E	4304734277	17123	Federal	GW	P	

Bonds: BLM = ESB000024  
BIA = 956010693  
State = 965010695

Questar Exploration Production Company (N5085) to QEP Energy Company (N3700)  
WONSITS VALLEY  
effective June 14, 2010

well_name	sec	tpw	rng	api	entity	mineral lease	type	stat	C
WV 12W-14-8-21	14	080S	210E	4304734279	17123	Federal	GW	TA	
WV 14M-11-8-21	11	080S	210E	4304734280	17123	Federal	GW	P	
WV 14W-14-8-21	14	080S	210E	4304734281	17123	Federal	GW	S	
WV 16G-14-8-21	14	080S	210E	4304734283	5265	Federal	OW	P	
WV 3MU-15-8-21	15	080S	210E	4304734289	17123	Federal	GW	P	
WV 4MU-15-8-21	15	080S	210E	4304734291	17123	Federal	GW	P	
WV 5MU-15-8-21	15	080S	210E	4304734293	17123	Federal	GW	P	
WV 6W-15-8-21	15	080S	210E	4304734294	17123	Federal	GW	P	
WV 10W-15-8-21	15	080S	210E	4304734295	17123	Federal	GW	P	
WV 4W-24-8-21	24	080S	210E	4304734330	17123	Federal	GW	P	
WV 8M-23-8-21	23	080S	210E	4304734339	17123	Federal	GW	P	
WV 8W-24-8-21	24	080S	210E	4304734340	17123	Federal	GW	P	
WV 2W-8-8-22	08	080S	220E	4304734468	17123	Federal	GW	P	
WV 8W-7-8-22	07	080S	220E	4304734469	17123	Federal	GW	S	
WV 8W-22-8-21	22	080S	210E	4304734564	17123	Federal	GW	P	
WV 14MU-10-8-21	10	080S	210E	4304735879	17123	Federal	GW	P	
WV 13MU-10-8-21	10	080S	210E	4304736305	17123	Federal	GW	P	
WV 3D-13-8-21	13	080S	210E	4304737923	17123	Federal	GW	OPS	C
WV 14DML-12-8-21	12	080S	210E	4304737924	17123	Federal	GW	P	
WV 15AML-12-8-21	12	080S	210E	4304737925	17123	Federal	GW	OPS	C
WV 13DML-10-8-21	10	080S	210E	4304737926	17123	Federal	GW	P	
WV 4DML-15-8-21	15	080S	210E	4304737927	17123	Federal	GW	P	
WV 11AD-14-8-21	14	080S	210E	4304738049	17123	Federal	GW	P	
WV 6-24-8-21	24	080S	210E	4304738663	17123	Federal	GW	P	
WV 2ML-24-8-21	24	080S	210E	4304738664		Federal	GW	APD	C
WV 16C-14-8-21	14	080S	210E	4304738737	17123	Federal	GW	P	
WV 7BML-24-8-21	24	080S	210E	4304738970		Federal	GW	APD	C
WV 7AML-12-8-21	12	080S	210E	4304739035		Federal	GW	APD	C
WV 14BML-12-8-21	12	080S	210E	4304739036		Federal	GW	APD	C
WV 14B-13-8-21	13	080S	210E	4304739037		Federal	GW	APD	C
WV 4B-14-8-21	14	080S	210E	4304739038		Federal	GW	APD	C
WV 13A-15-8-21	15	080S	210E	4304739039	17123	Federal	GW	P	
WV 8D-15-8-21	15	080S	210E	4304739040	17123	Federal	GW	P	
WV 4BD-23-8-21	23	080S	210E	4304739041	17123	Federal	GW	P	
WV 7CML-11-8-21	11	080S	210E	4304739042		Federal	GW	APD	C
WV 7BD-23-8-21	23	080S	210E	4304739044	17123	Federal	GW	P	
WV 2CML-7-8-22	07	080S	220E	4304739155		Federal	GW	APD	C
WV 13AD-8-8-22R(RIGSKID)	08	080S	220E	4304739321	17123	Federal	GW	P	
WV 2B-22-8-21	22	080S	210E	4304740262		Federal	GW	APD	C
WV 8D-22-8-21	22	080S	210E	4304740263		Federal	GW	APD	C
WV 7A-24-8-21	24	080S	210E	4304740331		Federal	GW	APD	C



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, UT 84145-0155

<http://www.blm.gov/ut/st/en.html>



IN REPLY REFER TO:  
3100  
(UT-922)

JUL 28 2010

### Memorandum

To: Vernal Field Office, Price Field Office, Moab Field Office

From: Chief, Branch of Minerals

*Roy L Bankert*

Subject: Name Change Recognized

Attached is a copy of the Certificate of Name Change issued by the Texas Secretary of State and a decision letter recognizing the name change from the Eastern States Office. We have updated our records to reflect the name change in the attached list of leases.

The name change from **Questar Exploration and Production Company** into **QEP Energy Company** is effective June 8, 2010.

cc: MMS  
UDOGM

RECEIVED

AUG 16 2010

DIV. OF OIL, GAS & MINERALS