

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

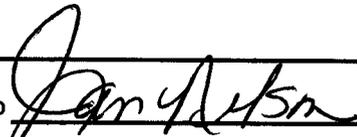
SUBMIT IN TRIPLICATE*

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN		5. LEASE DESIGNATION AND SERIAL NO. <p align="center">UTU-0809</p>
TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME <p align="center">UTE TRIBE</p>
TYPE OF WELL <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE		7. UNIT AGREEMENT NAME <p align="center">WONSITS VALLEY UNIT</p>
OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		8. FARM OR LEASE NAME, WELL NO. <p align="center">WV 7BML-23-8-21</p>
2. NAME OF OPERATOR <p align="center">QUESTAR EXPLORATION & PRODUCTION, CO.</p>	Contact: Jan Nelson E-Mail: jan.nelson@questar.com	9. API NUMBER: <p align="center">43-047-39044</p>
3. ADDRESS <p align="center">1571 E 1700 S VERNAL, UT 84078</p>	Telephone number <p align="center">Phone 435-781-4032 Fax 435-781-4045</p>	10. FIELD AND POOL, OR WILDCAT <p align="center">WONSITS VALLEY</p>
4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements*) At Surface <u>62610EX</u> 1418' FNL 2559' FEL SWNE SECTION 23 T8S R21E At proposed production zone <u>4441082Y 40.112494 -109.526330</u>		11. SEC., T, R, M, OR BLK & SURVEY OR AREA <p align="center">SEC. 23, T8S, R21E Mer SLB</p>
14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE* <p align="center">10 +/- EAST OF OURAY, UTAH</p>		12. COUNTY OR PARISH <p align="center">Uintah</p>
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (also to nearest drig, unit line if any) <p align="center">1418' +/-</p>		13. STATE <p align="center">UT</p>
16. NO. OF ACRES IN LEASE <p align="center">320.00</p>		17. NO. OF ACRES ASSIGNED TO THIS WELL <p align="center">20</p>
18. DISTANCE FROM PROPOSED location to nearest well, drilling, completed, applied for, on this lease, ft <p align="center">920' +/-</p>		20. BLM/BIA Bond No. on file <p align="center">ESB000024</p>
19. PROPOSED DEPTH <p align="center">11,350'</p>		23. Estimated duration <p align="center">14 Days</p>
21. ELEVATIONS (Show whether DF, RT, GR, ect.) <p align="center">4853.6' GR</p>		22. DATE WORK WILL START <p align="center">ASAP</p>
24. Attachments		

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

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Well plat certified by a registered surveyor. 2. A Drilling Plan 3. A surface Use Plan (if location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | <ol style="list-style-type: none"> 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be required by the authorized officer. |
|--|---|

SIGNED  Name (printed/typed) Jan Nelson DATE 2-1-07

TITLE Regulatory Affairs

(This space for Federal or State office use)

PERMIT NO. 43-047-39044 APPROVAL DATE _____

Application approval does not warrant or certify the applicant holds any legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

CONDITIONS OF APPROVAL, IF ANY: _____

APPROVED BY  TITLE BRADLEY G. HILL ENVIRONMENTAL MANAGER DATE 02-08-07

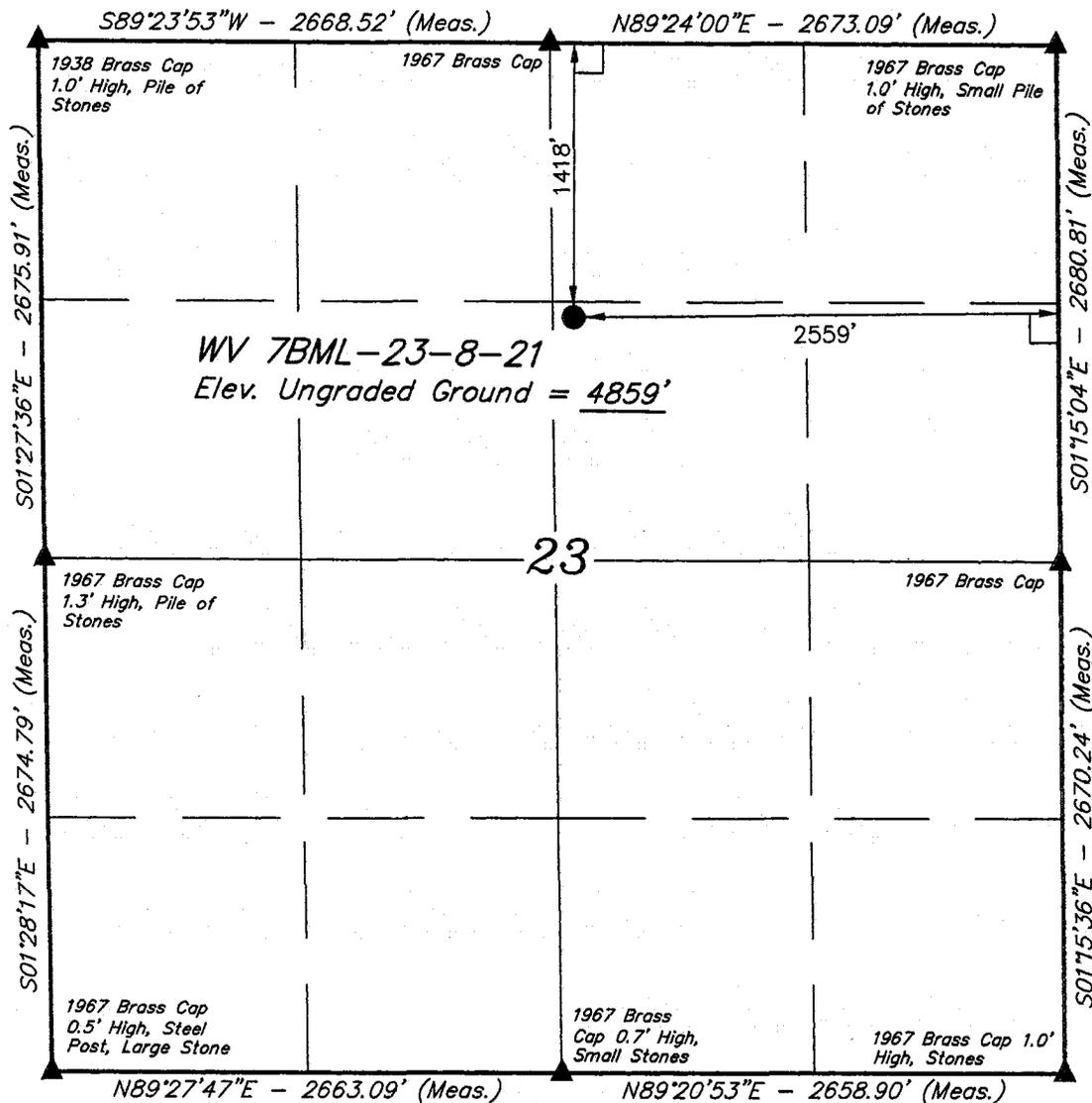
RECEIVED
FEB 05 2007
DIV. OF OIL, GAS & MINING

*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

*Federal Approval of this
Action is Necessary*

CONFIDENTIAL

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



LEGEND:

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

(NAD 83)
 LATITUDE = 40°06'44.84" (40.112456)
 LONGITUDE = 109°31'15.50" (109.520972)
 (NAD 27)
 LATITUDE = 40°06'44.97" (40.112492)
 LONGITUDE = 109°31'13.02" (109.520283)

QUESTAR EXPLR. & PROD.

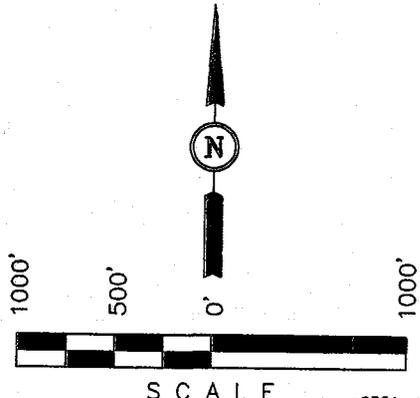
Well location, WV #7BML-23-8-21, located as shown in the SW 1/4 NE 1/4 of Section 23, T8S, R21E, S.L.B.&M., Uintah County, Utah.

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.



CERTIFICATE OF ACCURACY
 REGISTERED LAND SURVEYOR
 ROBERT L. KAY
 REGISTRATION NO. 141115
 STATE OF UTAH

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

SCALE 1" = 1000'	DATE SURVEYED: 10-12-06	DATE DRAWN: 10-17-06
PARTY D.A. J.B. S.L.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QUESTAR EXPLR. & PROD.	

Additional Operator Remarks

Questar Explor. & Prod. Co. proposes to drill a well to 11,350' 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 Questar Explor. & Prod. Co. 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 Questar Explor. & Prod. Co. 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 Questar Explor. & Prod. Co. via surety as consent as provided for the 43 CFR 3104.2.

Questar Exploration & Production, Co.
WV 7BML-23-8-21

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:

Formation	Depth
Uinta	Surface
Green River	2565'
Mahogany Ledge	3320'
Wasatch	5880'
Mesa Verde	8820'
Sego	11,240'
TD	11,350'

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:

Substance	Formation	Depth
Oil/Gas	Mesa Verde	11,350'

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 no flows are detected, samples will be submitted to the BLM along with any water analyses conducted.

3. Anticipated Bottom Hole Pressures

Maximum anticipated bottom hole pressure equals approximately 6787.0 psi.

5M BOP STACK

11" Rotating Head

11" Spacer Spool

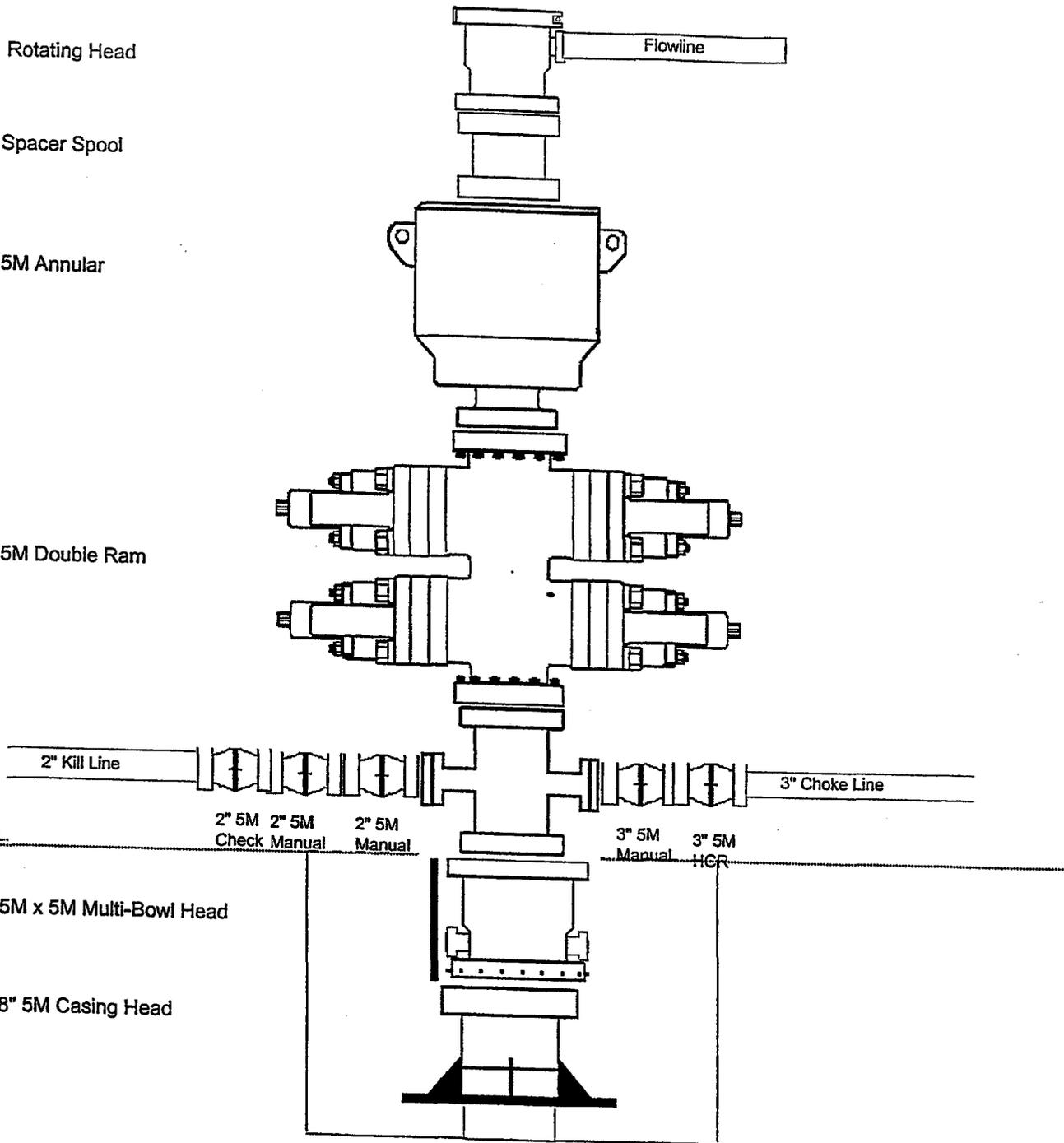
11" 5M Annular

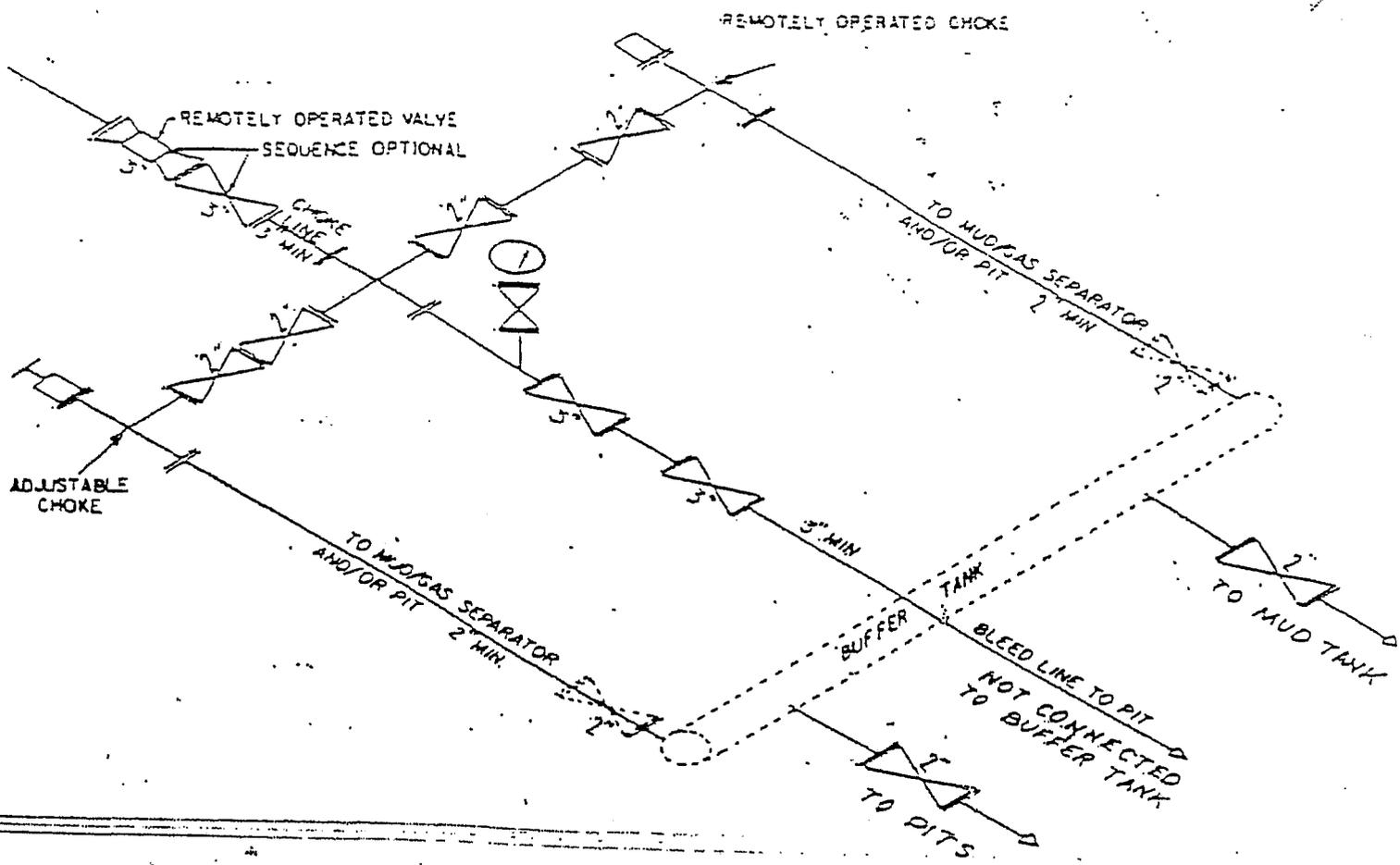
11" 5M Double Ram

G.L.

11" 5M x 5M Multi-Bowl Head

9 5/8" 5M Casing Head





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

QUESTAR EXPLORATION & PRODUCTION, CO.
WV 7BML-23-8-21
1418' FNL 2559' FEL
SWNE, SECTION 23, T8S, R21E
UINTAH COUNTY, UTAH
LEASE # UTU-0809

ONSHORE ORDER NO. 1

MULTI – POINT SURFACE USE & OPERATIONS PLAN

1. **Existing Roads:**

The proposed well site is approximately 10 miles east of 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 Questar Explor. & Prod. Co 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 Questar Explor. & Prod. Co 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 Questar Explor. & Prod. Co 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 Questar Explor. & Prod. Co 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 Questar Explor. & Prod. Co 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 Questar Explor. & Prod. Co 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 Questar Explor. & Prod. Co 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:

6 lbs Hycrest Crested Wheatgrass

6 lbs Needle & Threadgrass

Final Reclamation:

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

11. **Surface Ownership:**

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

Ute Tribe

PO Box 70

FT. Duchesne, UT 84026

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.

Lessee's or Operator's Representative:

Jan Nelson
Red Wash Rep.
Questar Exploration & Production, Co.
1571 East 1700 South
Vernal, Utah 84078
(435) 781-4032

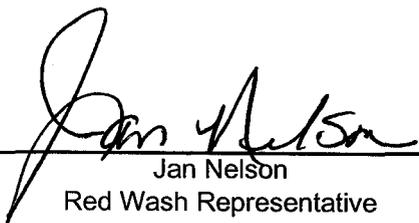
Certification:

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 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 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

01-Feb-07

Date

QUESTAR EXPLR. & PROD.

WV #7BML-23-8-21

LOCATED IN UINTAH COUNTY, UTAH
SECTION 23, T8S, R21E, S.L.B.&M.

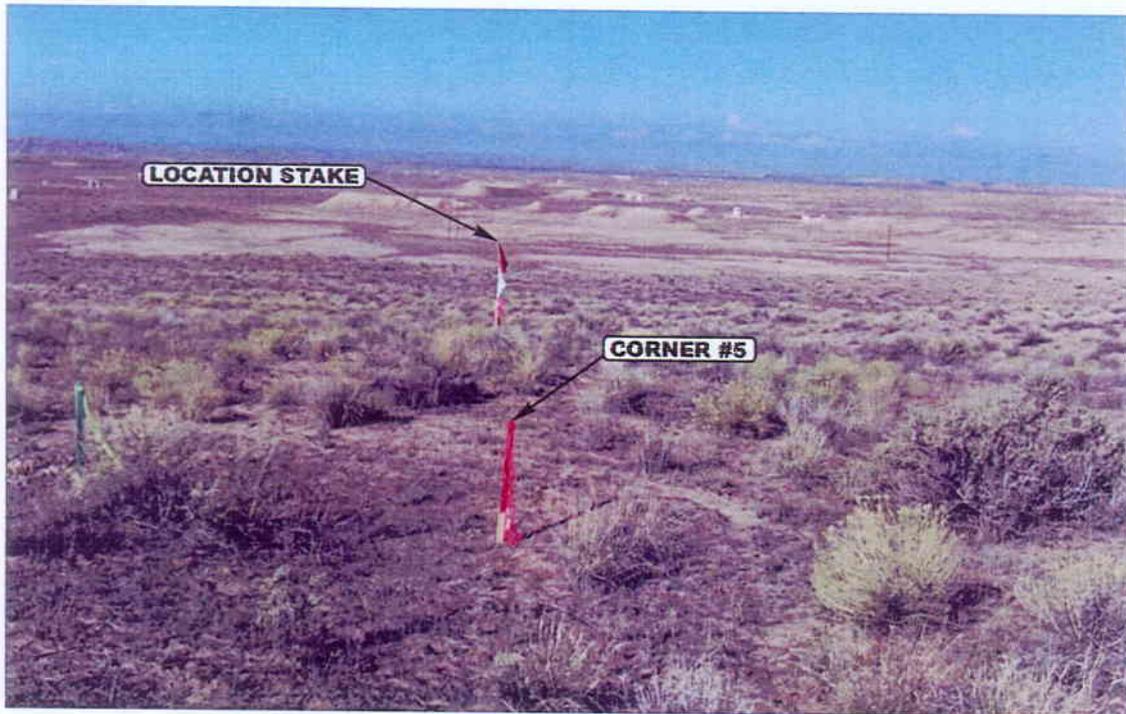


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY

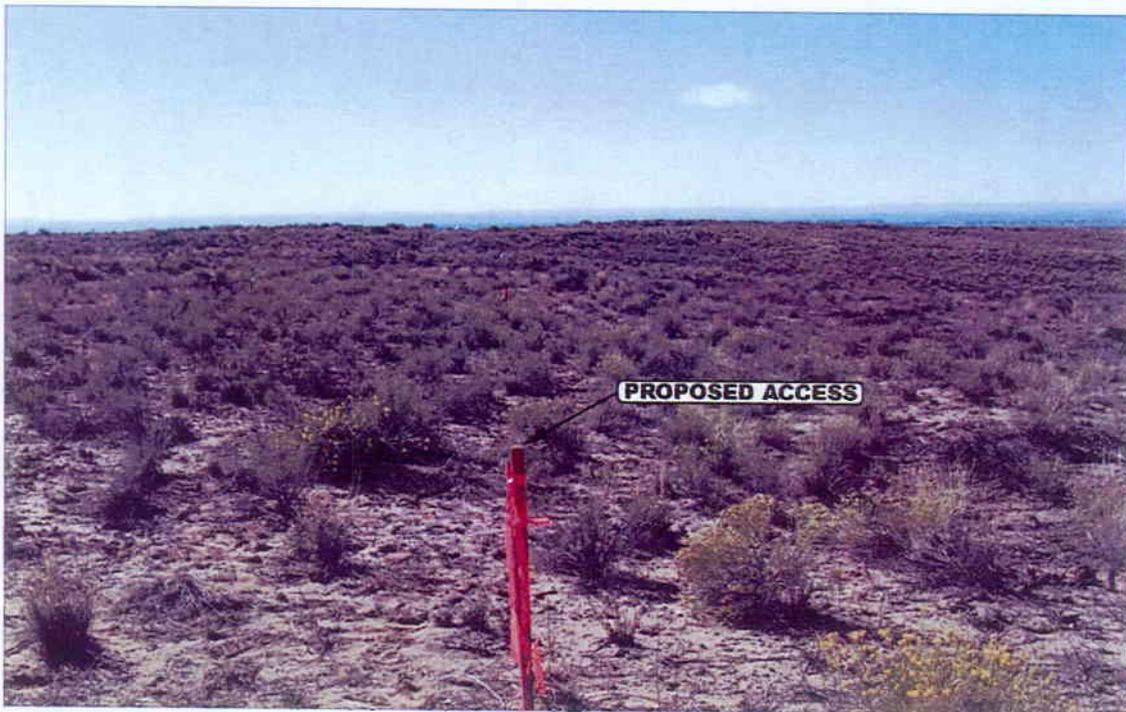


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHERLY



- Since 1964 -

UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

10 13 06
MONTH DAY YEAR

PHOTO

TAKEN BY: D.A.

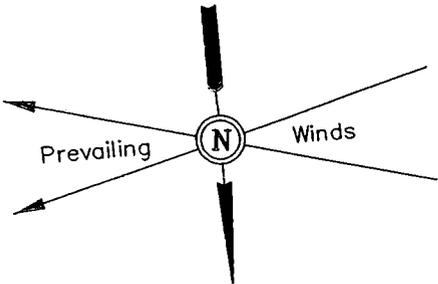
DRAWN BY: L.K.

REVISED: 00-00-00

QUESTAR EXPLR. & PROD.

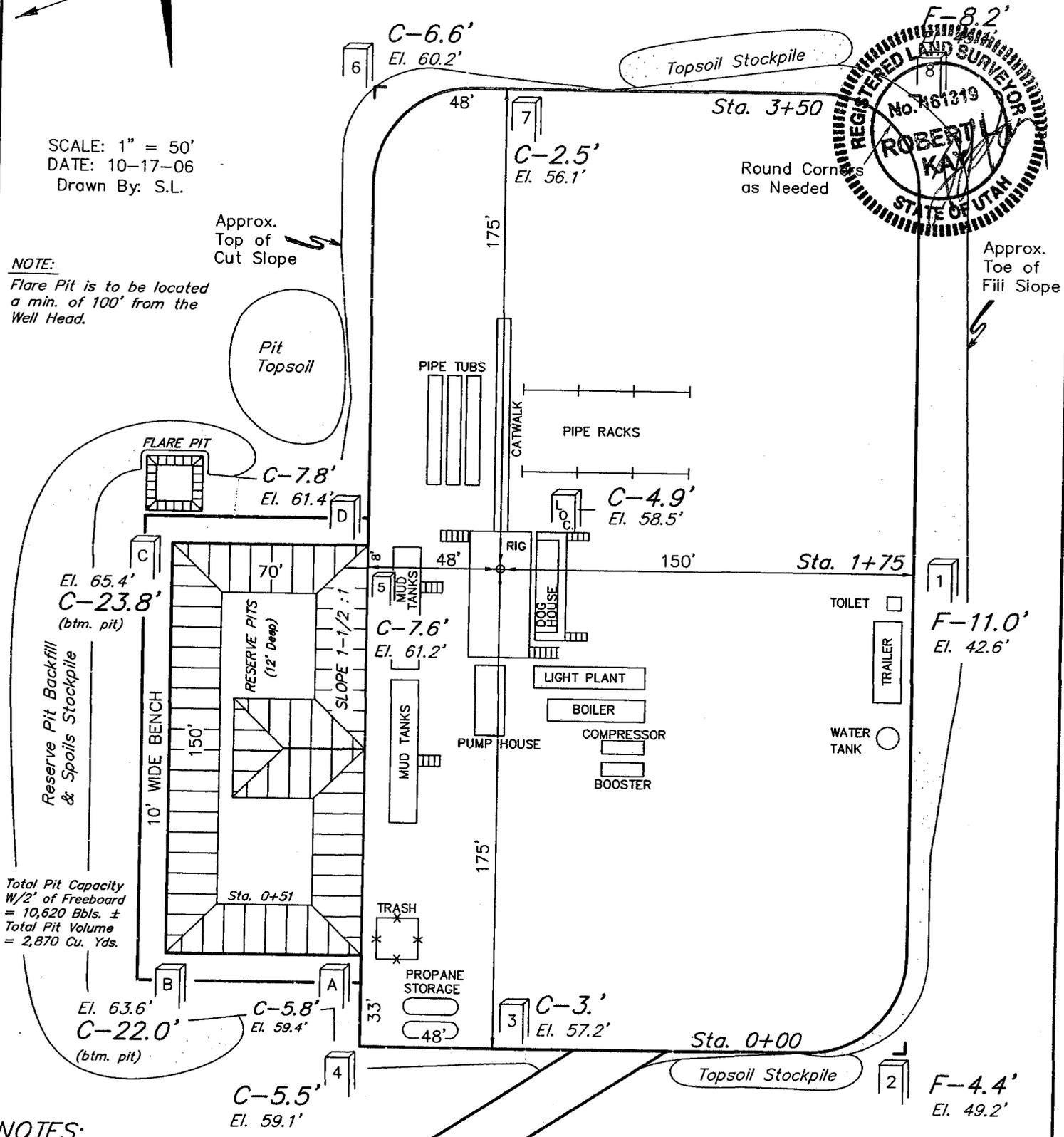
FIGURE #1

LOCATION LAYOUT FOR
 WV # 7BML-23-8-21
 SECTION 23, T8S, R21E, S.L.B.&M.
 1418' FNL 2559' FEL



SCALE: 1" = 50'
 DATE: 10-17-06
 Drawn By: S.L.

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



NOTES:

Elev. Ungraded Ground At Loc. Stake = 4858.5'
 FINISHED GRADE ELEV. AT LOC. STAKE = 4853.6'

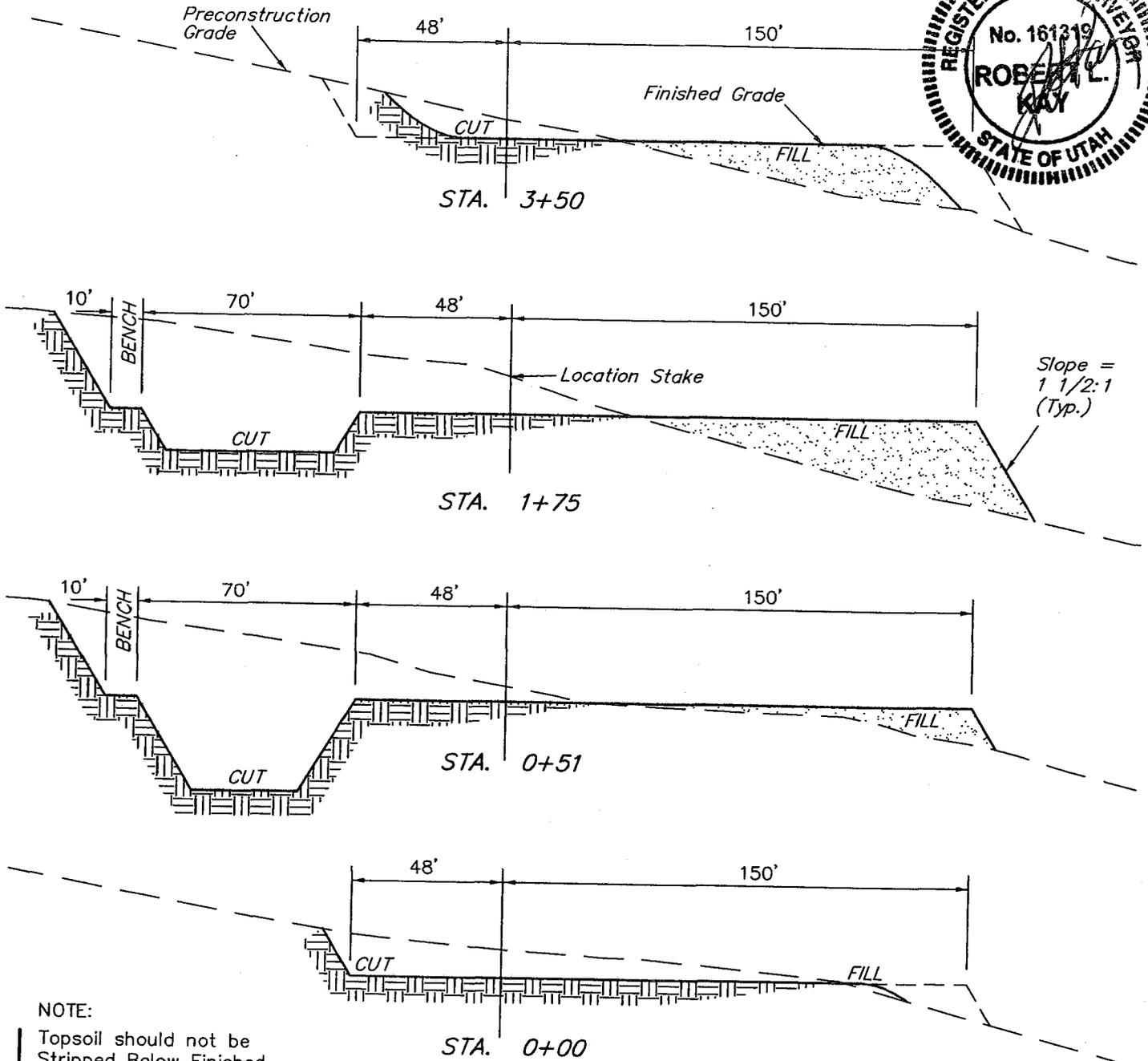
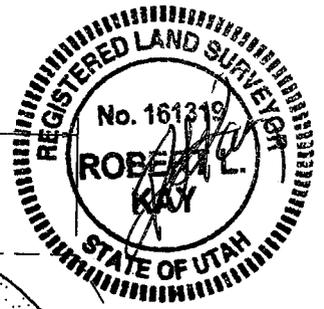
QUESTAR EXPLR. & PROD.

FIGURE #2

TYPICAL CROSS SECTIONS FOR
 WV # 7BML-23-8-21
 SECTION 23, T8S, R21E, S.L.B.&M.
 1418' FNL 2559' FEL

X-Section Scale
 1" = 50'

DATE: 10-17-06
 Drawn By: S.L.



NOTE:

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

APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,870 Cu. Yds.
Remaining Location	= 10,920 Cu. Yds.
TOTAL CUT	= 12,790 CU.YDS.
FILL	= 9,480 CU.YDS.

* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

Excess Material	= 3,310 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 3,310 Cu. Yds.
EXCESS UNBALANCE	= 0 Cu. Yds.
(After Interim Rehabilitation)	

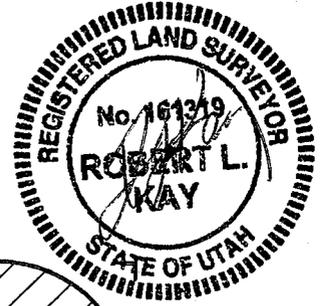
UINTAH ENGINEERING & LAND SURVEYING
 85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

QUESTAR EXPLR. & PROD.

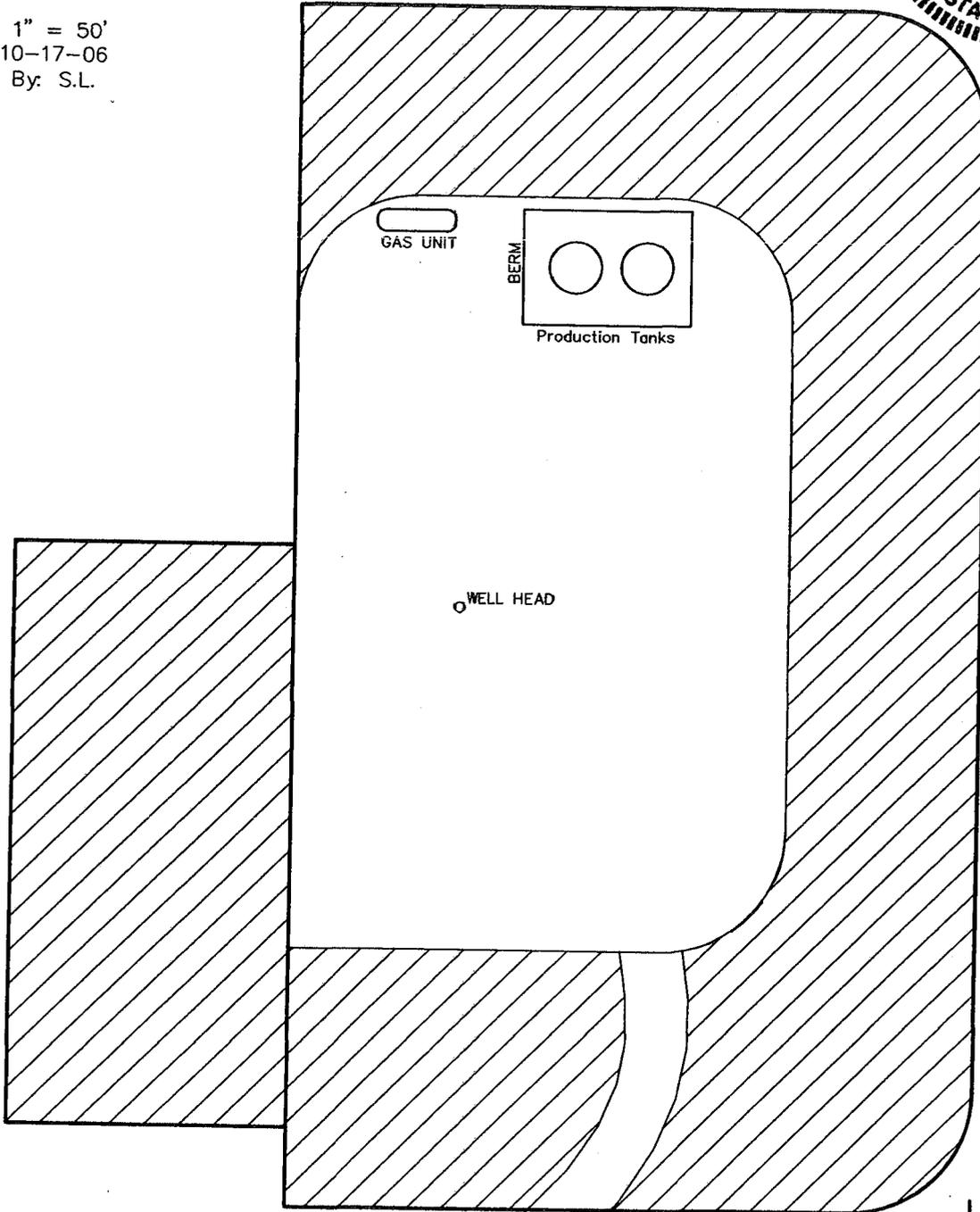
INTERIM RECLAMATION PLAN FOR

WV # 7BML-23-8-21
SECTION 23, T8S, R21E, S.L.B.&M.
1418' FNL 2559' FEL

FIGURE #3

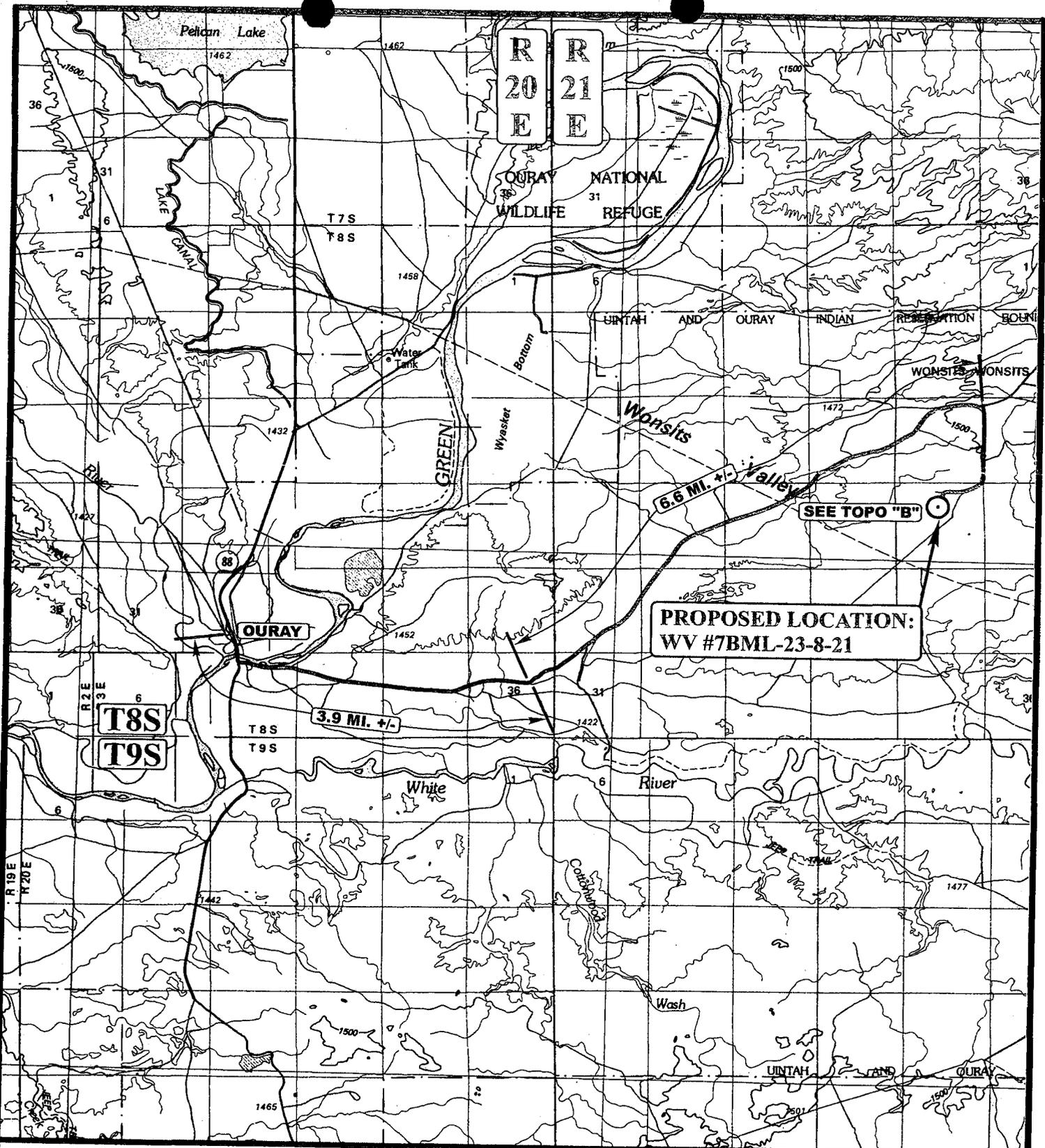


SCALE: 1" = 50'
DATE: 10-17-06
Drawn By: S.L.



 INTERIM RECLAMATION

Proposed Access Road



LEGEND:

○ PROPOSED LOCATION



QUESTAR EXPLR. & PROD.

WV #7BML-23-8-21
 SECTION 23, T8S, R21E, S.L.B.&M.
 1418' FNL 2559' FEL



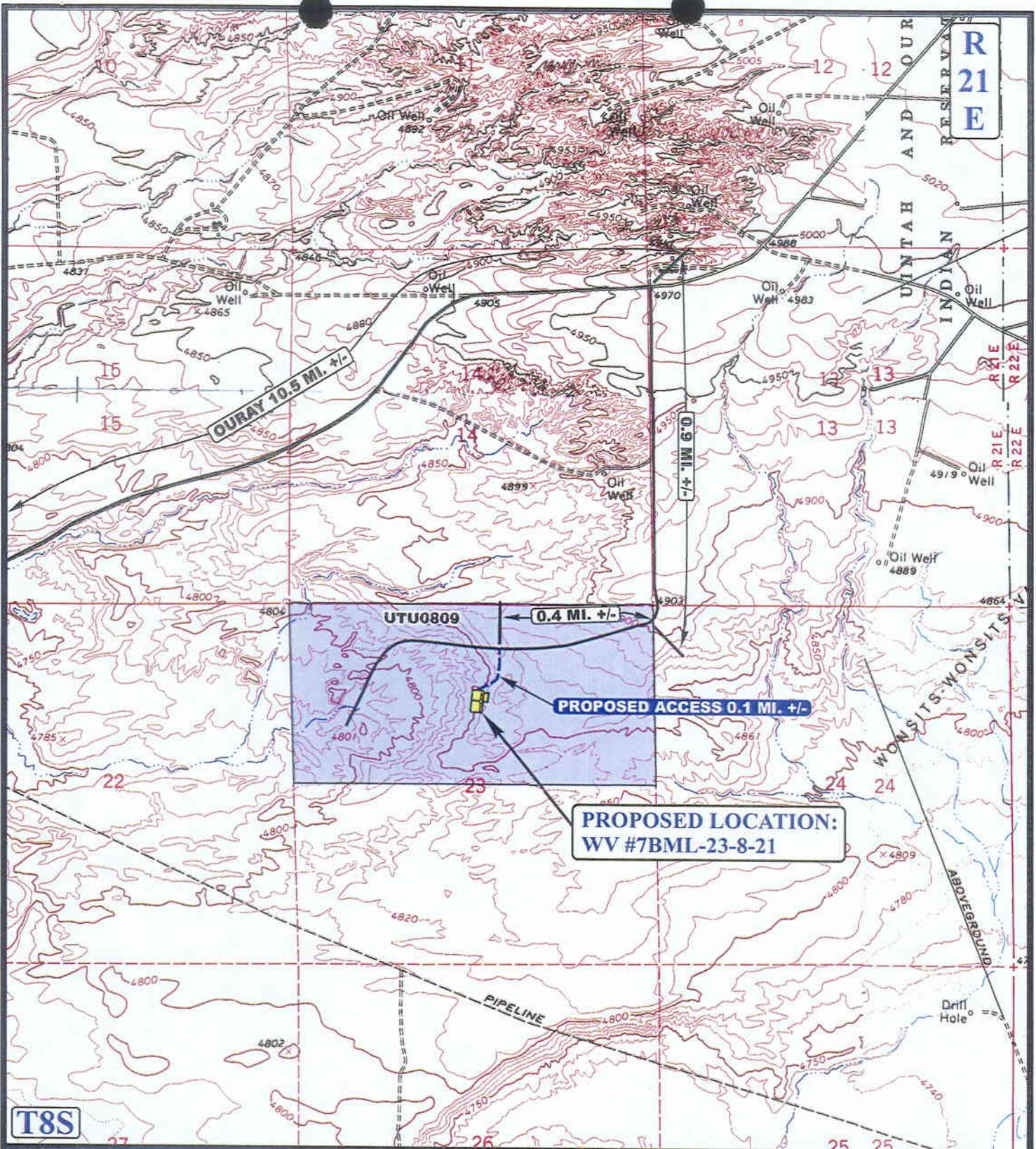
Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC
 MAP

10 13 06
 MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: L.K. REVISED: 00-00-00





T8S

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING ROAD



QUESTAR EXPLR. & PROD.

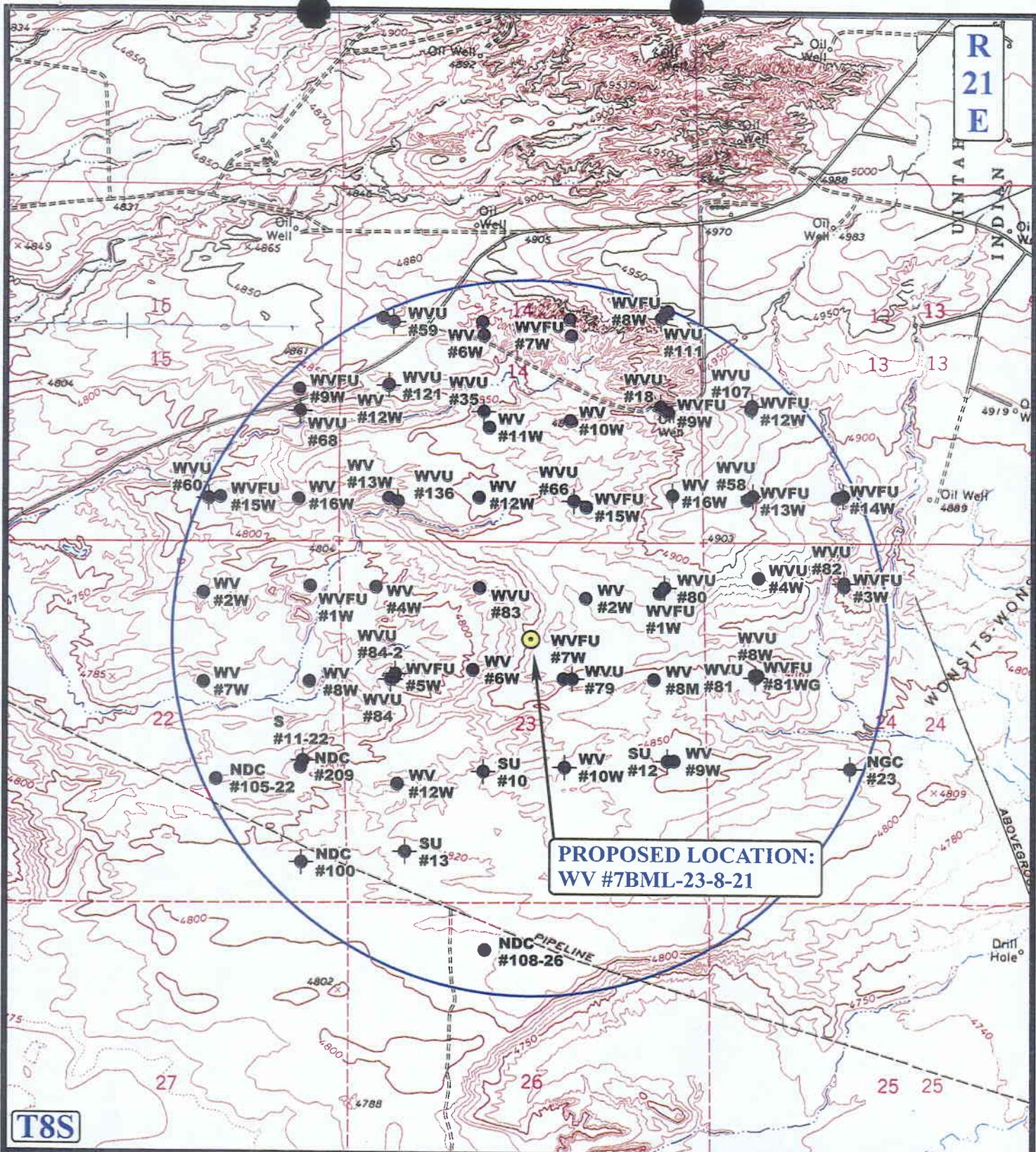
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Utah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP
 10 13 06
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: L.K. REVISED: 00-00-00





**PROPOSED LOCATION:
WV #7BML-23-8-21**

LEGEND:

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

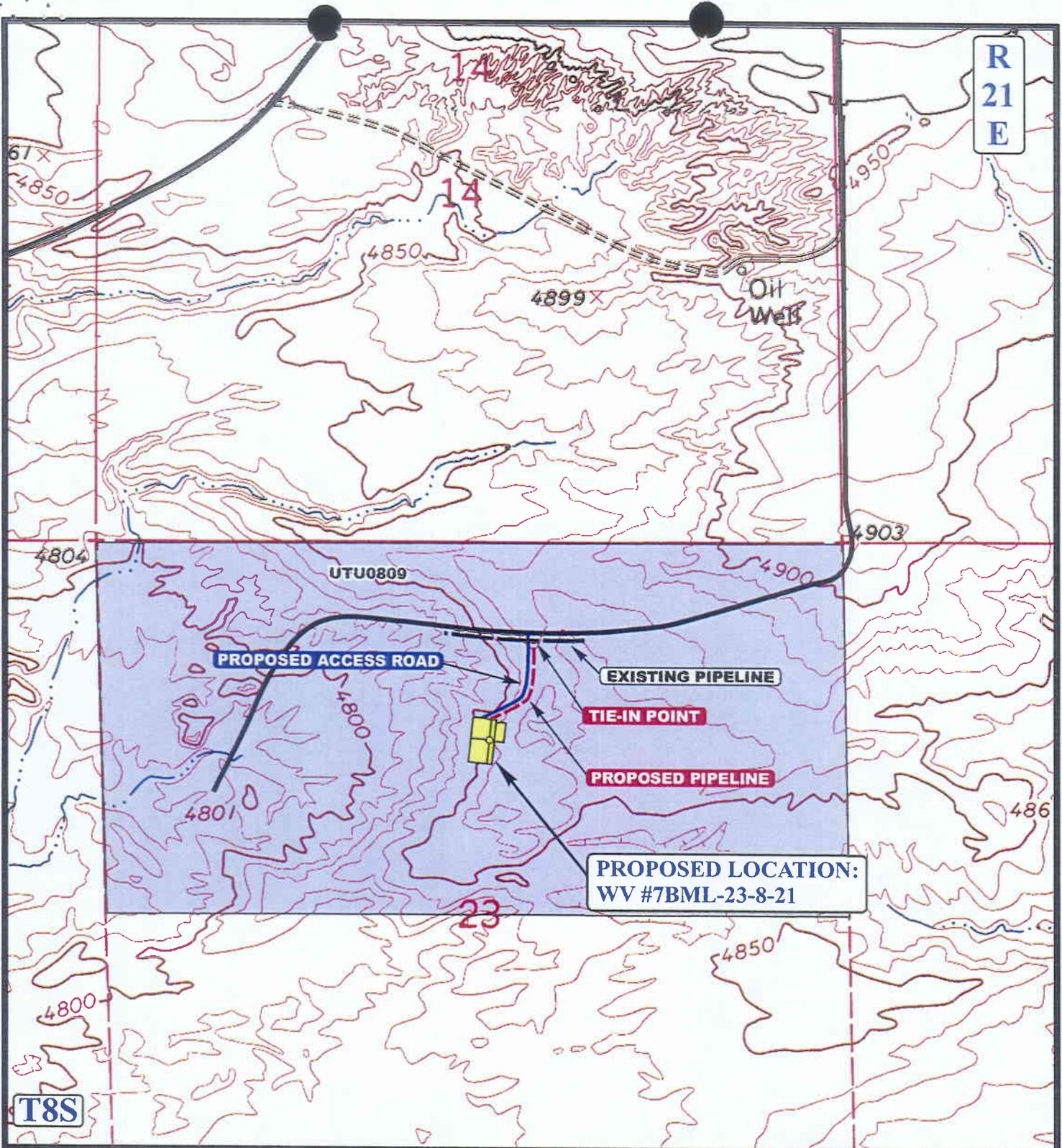
QUESTAR EXPLR. & PROD.

**WV #7BML-23-8-21
SECTION 23, T8S, R21E, S.L.B.&M.
1418' FNL 2559' FEL**

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

TOPOGRAPHIC MAP **10 13 06**
 MONTH DAY YEAR
 SCALE: 1" = 2000' DRAWN BY: L.K. REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE DISTANCE = 720' +/-

LEGEND:

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

QUESTAR EXPLR. & PROD.

WV #7BML-23-8-21
 SECTION 23, T8S, R21E, S.L.B.&M.
 1418' FNL 2559' FEL



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 85 South 200 East Vernal, Utah 84078
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TOPOGRAPHIC 10 13 06
 MAP MONTH DAY YEAR
 SCALE: 1" = 1000' DRAWN BY: L.K. REVISED: 00-00-00



**WORKSHEET
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 02/05/2007

API NO. ASSIGNED: 43-047-39044

WELL NAME: WV 7BML-23-8-21
 OPERATOR: QUESTAR EXPLORATION & (N5085)
 CONTACT: JAN NELSON

PHONE NUMBER: 435-781-4032

PROPOSED LOCATION:
 SWNE 23 080S 210E
 SURFACE: 1418 FNL 2559 FEL
 BOTTOM: 1418 FNL 2559 FEL
 COUNTY: UINTAH
 LATITUDE: 40.11249 LONGITUDE: -109.5203
 UTM SURF EASTINGS: 626102 NORTHINGS: 4441082
 FIELD NAME: WONSITS VALLEY (710)

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

LEASE TYPE: 1 - Federal
 LEASE NUMBER: UTU-0809
 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. 43-8496)

RDCC Review (Y/N)
 (Date: _____)

Fee Surf Agreement (Y/N)

Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.

Unit: WONSITS VALLEY

___ R649-3-2. General
 Siting: 460 From Qtr/Qtr & 920' Between Wells

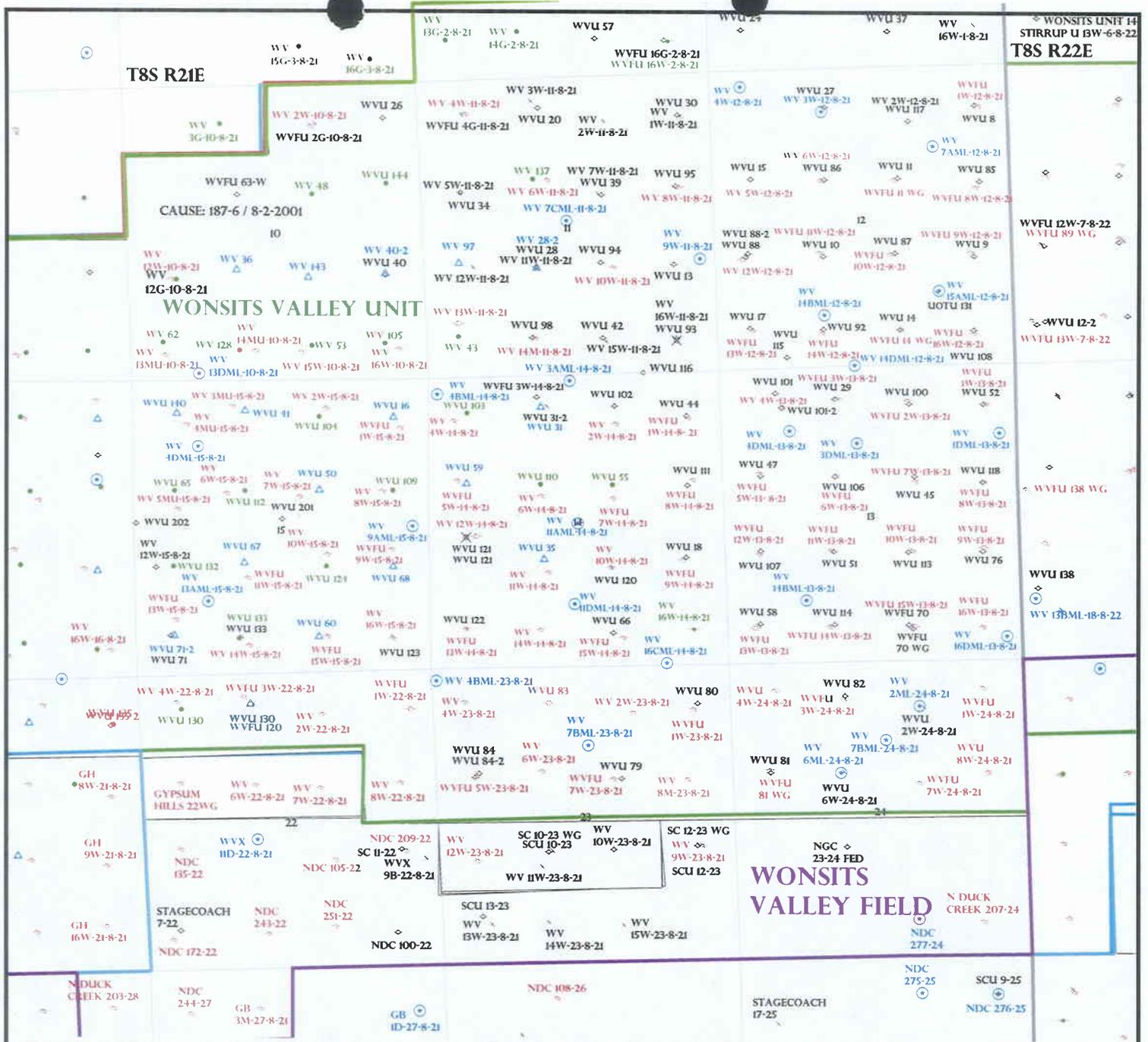
___ R649-3-3. Exception

Drilling Unit
 Board Cause No: 137-06
 Eff Date: 8-2-2007
 Siting: Suspends General Siting

___ R649-3-11. Directional Drill

COMMENTS: Sep, Separate file

STIPULATIONS: 1- Federal Approval



OPERATOR: QUESTAR EXPL & PROD (N5085)

SEC: 11,12,13,14,15,23 T.8S R. 21E

FIELD: WONSITS VALLEY (710)

COUNTY: Uintah

CAUSE: 187-6 / 8-2-2001

- | | |
|---------------------|--------------------|
| Field Status | Unit Status |
| ABANDONED | EXPLORATORY |
| ACTIVE | GAS STORAGE |
| COMBINED | NF PP OIL |
| INACTIVE | NF SECONDARY |
| PROPOSED | PENDING |
| STORAGE | PI OIL |
| TERMINATED | PP GAS |
| | PP GEOTHERML |
| | PP OIL |
| | SECONDARY |
| | TERMINATED |

- Wells Status**
- ⊗ GAS INJECTION
 - ⊗ GAS STORAGE
 - ⊗ LOCATION ABANDONED
 - ⊙ NEW LOCATION
 - ⊙ PLUGGED & ABANDONED
 - ⊙ PRODUCING GAS
 - ⊙ PRODUCING OIL
 - ⊙ SHUT-IN GAS
 - ⊙ SHUT-IN OIL
 - ⊙ TEMP. ABANDONED
 - ⊙ TEST WELL
 - ⊙ WATER INJECTION
 - ⊙ WATER SUPPLY
 - ⊙ WATER DISPOSAL
 - ⊙ DRILLING



PREPARED BY: DIANA MASON
DATE: 8-FEBRUARY-2007

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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

IN REPLY REFER TO:
3160
(UT-922)

February 8, 2007

Memorandum

To: Assistant District Manager Minerals, Vernal District
From: Michael Coulthard, Petroleum Engineer
Subject: 2007 Plan of Development Wonsits Valley Unit Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Wonsits Valley Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ MesaVerde)		
43-047-39042	WV 07CML-11-8-21	Sec. 11 T. 8S R. 21E 2608 FNL 2629 FEL
43-047-39035	WV 07AML-12-8-21	Sec. 12 T. 8S R. 21E 1446 FNL 1368 FEL
43-047-39036	WV 14BML-12-8-21	Sec. 12 T. 8S R. 21E 0946 FSL 1962 FWL
43-047-39037	WV 14BML-13-8-21	Sec. 13 T. 8S R. 21E 1125 FSL 1464 FWL
43-047-39038	WV 04BML-14-8-21	Sec. 14 T. 8S R. 21E 0300 FNL 0179 FWL
43-047-39039	WV 13AML-15-8-21	Sec. 15 T. 8S R. 21E 1340 FSL 1334 FWL
43-047-39040	WV 09AML-15-8-21	Sec. 15 T. 8S R. 21E 2609 FSL 0289 FEL
43-047-39041	WV 04BML-23-8-21	Sec. 23 T. 8S R. 21E 0189 FNL 0101 FWL
43-047-39044	WV 07BML-23-8-21	Sec. 23 T. 8S R. 21E 1418 FNL 2559 FEL

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

/s/ Michael L. Coulthard



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

February 8, 2007

Questar Exploration & Production, Co.
1571 E 1700 S
Vernal, UT 84078

Re: Wonsits Valley 7BML-23-8-21 Well, 1418' FNL, 2559' FEL, SW NE, Sec. 23,
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 43-047-39044.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Uintah County Assessor (via e-mail)
Bureau of Land Management, Vernal District Office

Operator: Questar Exploration & Production, Co.

Well Name & Number Wonsits Valley 7BML-23-8-21

API Number: 43-047-39044

Lease: UTU-0809

Location: SW NE Sec. 23 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 with 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 Dustin Doucet at (801) 538-5281 office
(801) 733-0983 home

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.**

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-0809

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
UTE TRIBE

7. UNIT AGREEMENT NAME
WONSITS VALLEY UNIT

8. FARM OR LEASE NAME, WELL NO.
WV 7BML-23-8-21

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

TYPE OF WORK
DRILL DEEPEN
TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE
JAN 3 1 2007

2. NAME OF OPERATOR
QUESTAR EXPLORATION & PRODUCTION, CO.
Contact: Jan Nelson
E-Mail: jan.nelson@questar.com

3. ADDRESS
1571 E 1700 S VERNAL, UT 84078
Telephone number
Phone 435-781-4032 Fax 435-781-4045

4. LOCATION OF WELL (Report location clearly and in accordance with and State requirements*)
At Surface 1418' FNL 2559' FEL SWNE SECTION 23 T8S R21E
At proposed production zone

14. DISTANCE IN MILES FROM NEAREST TOWN OR POSTOFFICE*
10 +/- EAST OF OURAY, UTAH

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
(also to nearest drlg, unit line if any)
1418' +/-

18. DISTANCE FROM PROPOSED location to nearest well, drilling, completed, applied for, on this lease, ft
920' +/-

21. ELEVATIONS (Show whether DF, RT, GR, ect.)
4853.6' GR

24. Attachments

9. API NUMBER:
43,047,39044

10. FIELD AND POOL, OR WILDCAT
WONSITS VALLEY

11. SEC., T, R, M, OR BLK & SURVEY OR AREA
SEC. 23, T8S, R21E Mer SLB

12. COUNTY OR PARISH
Uintah

17. NO. OF ACRES ASSIGNED TO THIS WELL
20

20. BLM/BIA Bond No. on file
ESB000024

23. Estimated duration
14 Days

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 2-1-07
TITLE Regulatory Affairs

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify the applicant holds any legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY [Signature] TITLE Assistant Field Manager Lands & Mineral Resources DATE 10-9-2007
*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
RECEIVED

OCT 1 1 2007

DIV. OF OIL, GAS & MINING

CONFIDENTIAL

No NOS
0788 2211A



**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: Questar Exploration & Production Co. **Location:** SWNE, Sec 23, T8S, R21E
Well No: WV 7BML-23-8-21 **Lease No:** UTU-0809
API No: 43-047-39044 **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	(435) 828-7368
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	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	
NRS/Enviro Scientist:		(435) 781-4476	
NRS/Enviro Scientist:	Chuck MacDonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Jannice Cutler	(435) 781-3400	(435) 828-3544
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

Fax: (435) 781-3420

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

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

NOTIFICATION REQUIREMENTS

Location Construction (Notify 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)**

Surface COAs:

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

Additional Stipulations:

- 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 APDs 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.
- Paint tanks Desert Tan
- Use rock and gravel as necessary
- Install culverts as necessary
- For any other additional stipulations, see concurrence letter.

DOWNHOLE CONDITIONS OF APPROVAL

SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL

- A surface casing shoe integrity test shall be performed.
- Production casing cement shall be at a minimum 200' above the surface shoe.

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

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

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

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

OPERATING REQUIREMENT REMINDERS:

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

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

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

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Serial No.

UTU-0809

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 7BML-23-8-21

9. API Well No.

43-047-39044

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)

1418' FNL 2559' FEL, SWNE, SECTION 23, 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 <u>TD CHANGE</u>
	<input checked="" type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon <u>NAME CHANGE</u>
	<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 DRILLING PLANS, INCREASE TOTAL DEPTH FROM 11,350 TO 16,875' FOR THIS WELL AND TO USE OIL BASE MUD FOR THE DRILLING OF THE FINAL SECTION OF THIS WELL TO IMPROVE DRILLING EFFICIENCY, WELLBORE STABILITY AND TO PROMOTE A GOOD CEMENT JOB OF THE PRODUCTION CASING. ATTACHED IS A DRILLING PLAN, WELLBORE DIAGRAM, DRILLING FLUID PROPOSAL AND A PROPOSAL FOR PROCESSING AND DISPOSAL OF THE OIL BASE MUD.

QEP IS REQUESTING TO CHANGE THE WELL NAME FROM WV 7BML-23-8-21 TO WV 7BD-23-8-21.

QUESTAR EXPLORATION & PRODUCTION COMPANY (QEP) WILL PROVIDE THE PROPER PAPER WORK TO BUREAU OF INDIAN AFFAIRS AND UTE TRIBE.

RECEIVED
JAN 04 2008

FOR TECHNICAL QUESTIONS, PLEASE CONTACT JIM DAVIDSON, CHIEF DRILLING ENGINEER FOR QEP, DIV. OF OIL, GAS & MINING (303) 308-3090.

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

Name (Printed/Typed)	Title
Laura Bills	Regulatory Affairs
Signature	Date
<i>Laura Bills</i>	January 3, 2008

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
<i>Bradley G. Hill</i>	BRADLEY G. HILL	01-07-08
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.	Office	
	ENVIRONMENTAL MANAGER	

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)

COPY SENT TO OPERATOR
Date: 1-8-2008
Initials: VS

Federal Approval of this Action Is Necessary

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	2,563'
Wasatch	5,883'
Mesaverde	8,843'
Sego	11,303'
Castlegate	11,423'
Blackhawk	11,767'
Mancos Shale	12,202'
Mancos B	12,618'
Frontier	15,265'
Dakota Silt	16,181'
Dakota	16,458'
TD	16,875'

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	5,883'
Gas	Mesaverde	8,843'
Gas	Blackhawk	11,767'
Gas	Mancos Shale	12,202'
Gas	Mancos B	12,618'
Gas	Dakota	16,458'

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" 5000 psi double gate, 5,000 psi annular BOP (schematic included) from surface hole to 9-5/8" casing point. A 13-5/8" 10,000 psi double and single gate may be substituted based on contractor availability and substructure height of the drilling rig.
- 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.

DRILLING PROGRAM

4. **Casing Design:**

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
11"	9-5/8"	sfc	8500'	47	HCP-110	Flush Jnt **	New
8-1/2"	7"	8000'	12,300'	29* SDrift	HCP-110	LTC	New
6-1/8"	4-1/2"	sfc	13,700'	15.1	P-110	LTC	New
6-1/8"	4-1/2"	13,700'	16,875'	15.1	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.

* Special Drift

** Flush Jnt – VAM SLIJ II

MINIMUM DESIGN FACTORS:

COLLAPSE: 1.125
 BURST: 1.10
 TENSION: 1.80

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

DRILLING PROGRAM

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 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. Oil based drilling mud will be used to drill the final section of the hole. The water based and oil based drilling system specifics are attached to this APD. Maximum anticipated mud weight is 15.4 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.

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

DRILLING PROGRAM

- 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% CaCl₂
Slurry wt: 15.6 ppg, slurry yield: 1.20 ft³/sx, slurry volume: 17-1/2" hole + 100% excess.

9-5/8" Intermediate Casing: sfc – 8,500' (MD)

Lead Slurry: 0' – 8,100'. 1151 sks (301 bbls) 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 ft³/sk (unfoamed), Slurry volume: 11" hole + 35 % excess.

Tail Slurry: 8,100' – 8,500'. 57 sks (15 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 ft³/sk, Slurry volume: 11" hole + 35% excess.

7" Intermediate Casing: 8,000 - 12,300' (MD)

Foamed Lead Slurry 2: 8,000' – 12,300'. 429 sks (682 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 ft³/sk, Slurry volume: 8-1/2" hole + 25% excess.

4-1/2" Production Casing: sfc – 16,875' (MD)

Lead/Tail Slurry: 5,500 - 16,875'. 970 sks (1446 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 ft³/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.

DRILLING PROGRAM

8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No H₂S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 13,800 psi. Maximum anticipated bottom hole temperature is 315° F.

9. Additional Information for Oil Base Mud

- A. See attached diagram of well pad layout. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 30 millimeters thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. At the beginning of drilling operations this reserve pit will have an open-ended dike placed in the pit that allows the fluids to migrate from one side of the pit to the other during the drilling of the surface and intermediate hole using water based mud. At the time that operations begin to drill the production hole with oil base mud, this dike will be extended, dividing the pit into two distinct, isolated halves allowing no migration of fluids from one side to the other. At that time all fluids will be removed from the end of the pit to be used as a cuttings pit. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.
- B. Oil-base mud will be mixed in the closed circulating system and transferred to four 500-bbl tanks on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be collected in a steel catch tank once they leave the closed circulating system and transported and placed into the cuttings half of the reserve pit.
- C. Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and

DRILLING PROGRAM

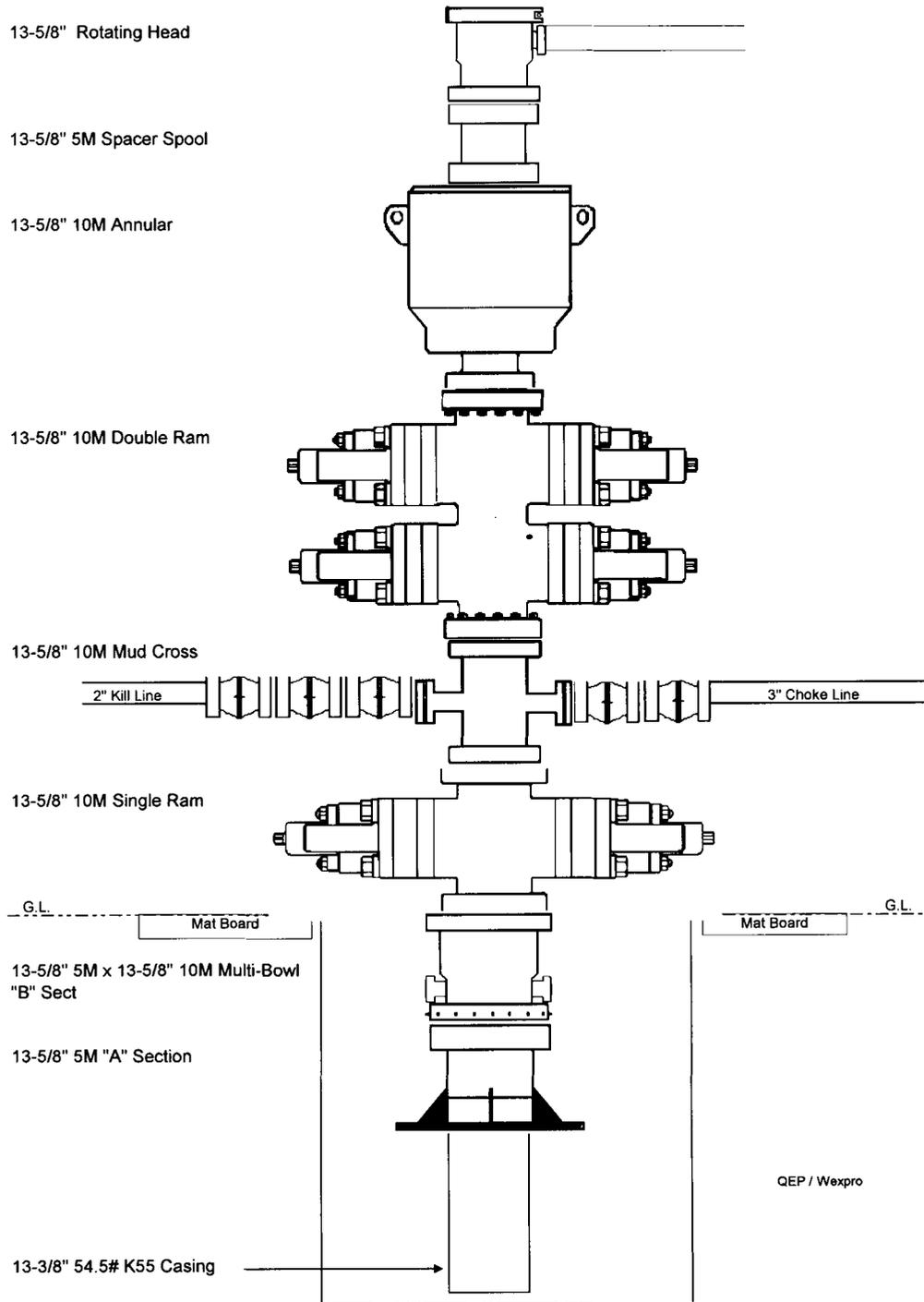
sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings half of the pit.

- D.** All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.

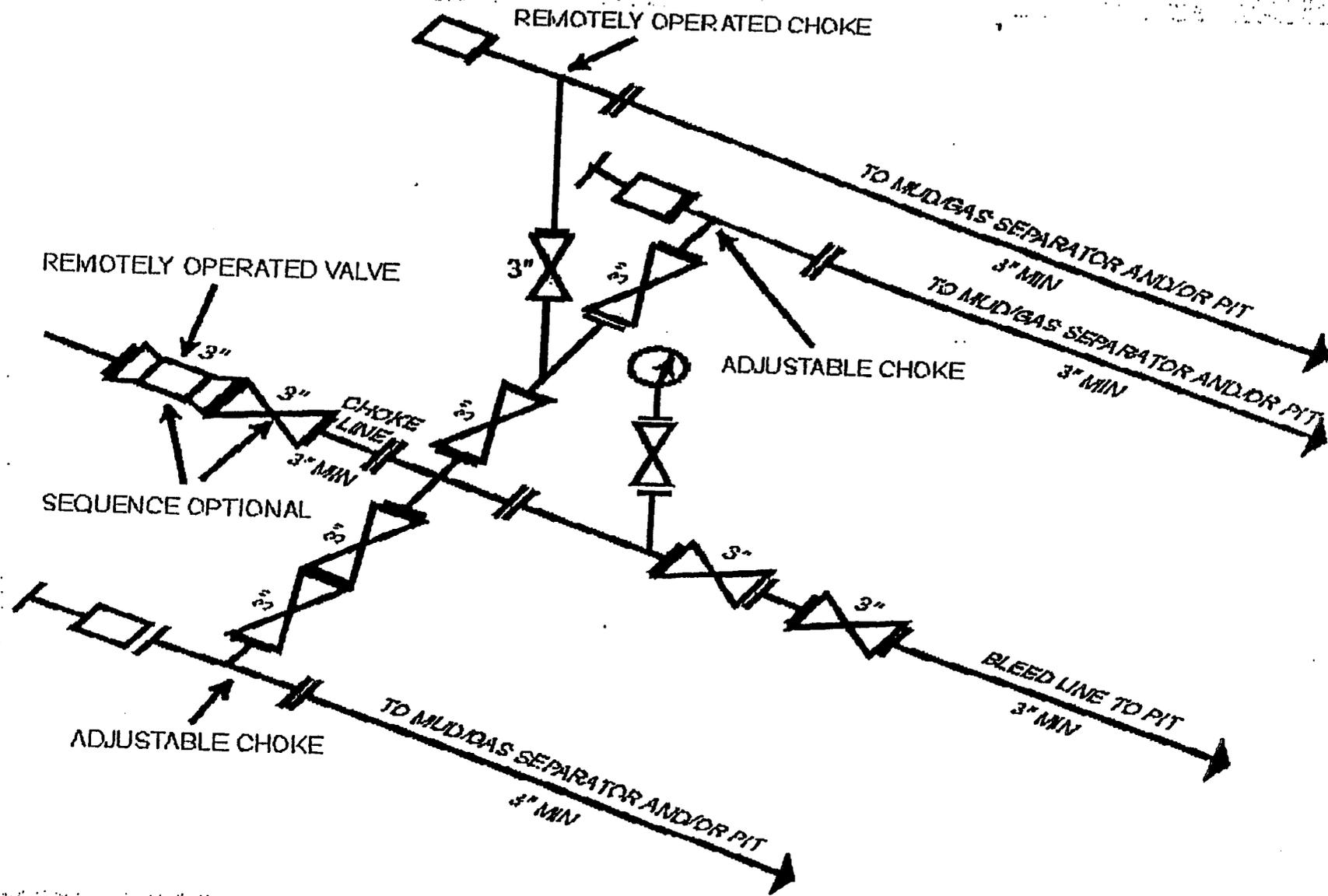
- E.** Once all waste has been placed in the cuttings portion of the pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings side of the pit and that portion of the pit area will be returned to the existing grade bordering the pit. Please see the attached Soli-Bond Proposal for Processing and Disposal of Drilling Waste for specific details. The half of the reserve pit containing water base materials will be left to evaporate and will be closed and reclaimed at the time that portion of the pit is dry.

DRILLING PROGRAM

BOP Requirements:



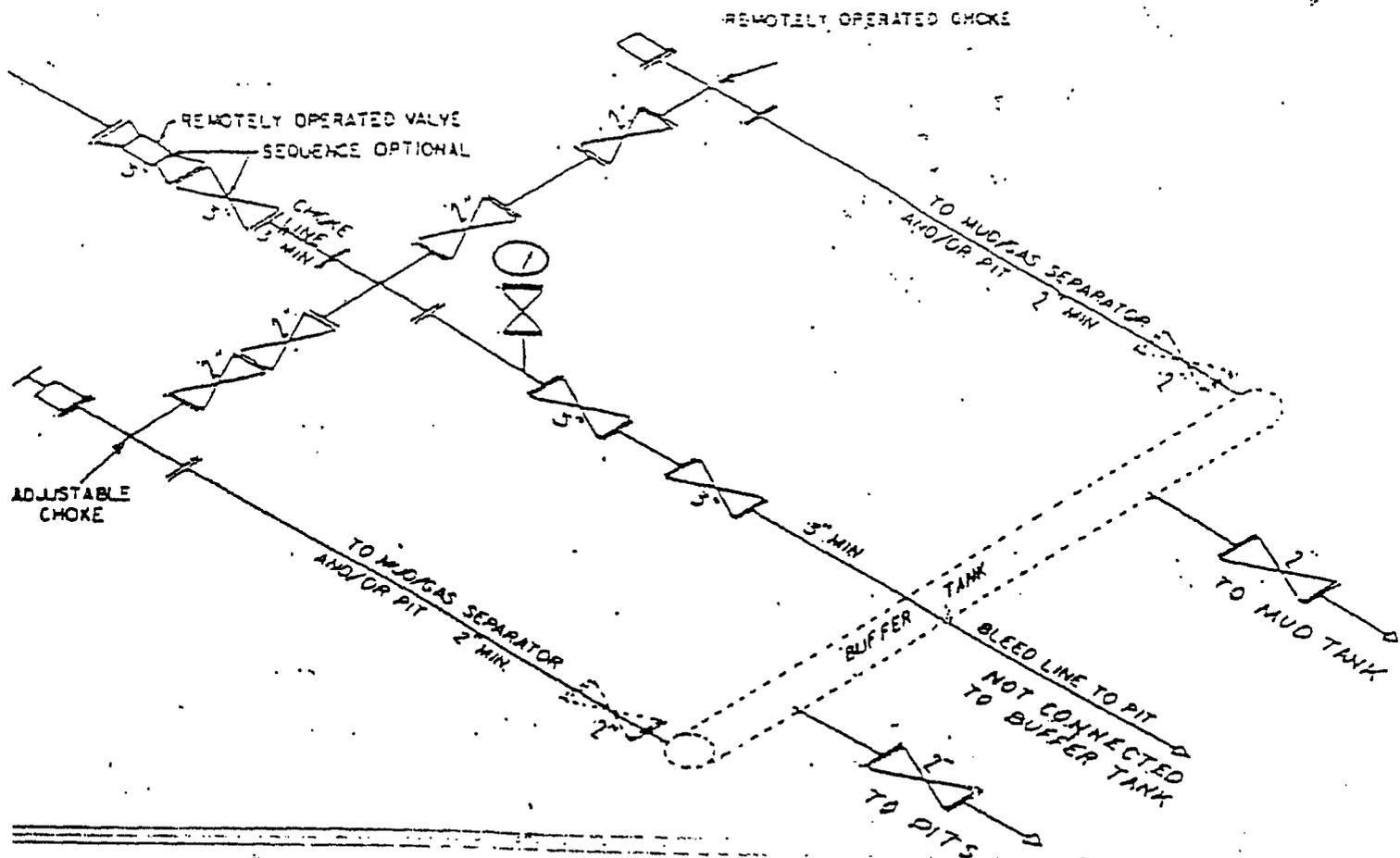
Attachment I. Diagrams of Choke Manifold Equipment



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

[34 FR 39528, Sept. 27, 1969]

Last Updated March 25, 1997 by John Broderick



② SM CHOKE MANIFOLD EQUIPMENT — CONFIGURATION OF CHOKES MAY VARY

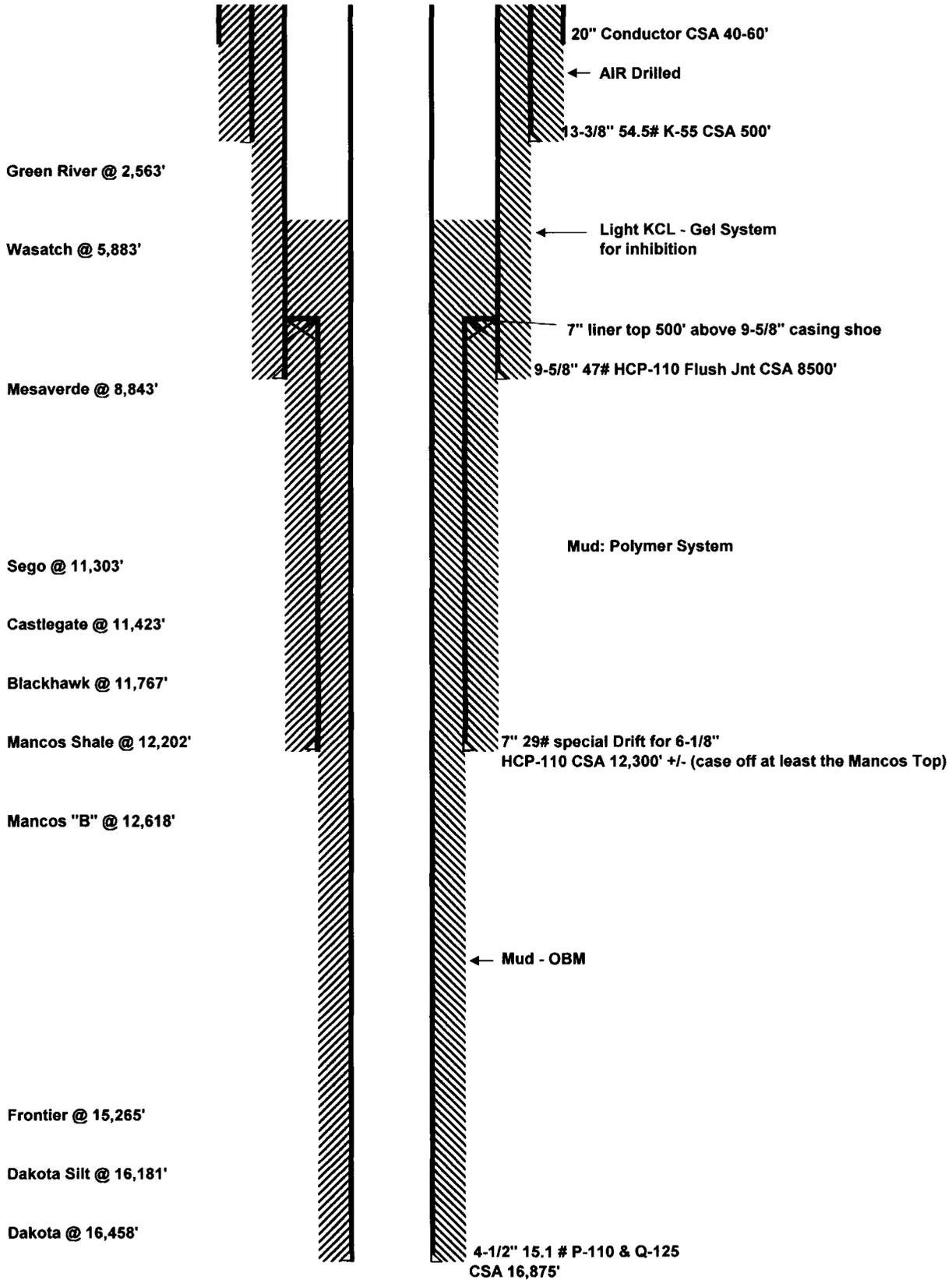
DRILLING PROGRAM

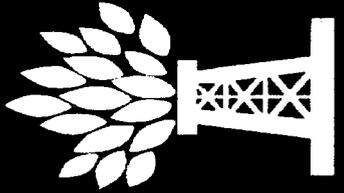
Reclamation for Oil Base Cuttings

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. (Please review the attached survey plat).

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.

WV 7BD-23-8-21





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

**Questar
Exploration &
Production Company**

WV 7BD-23-8-21

***Sec 23-T8S-R23E
Uintah County, Utah***

Drilling Fluids Program

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



Newpark Drilling Fluids, LP

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■ Denver, Colorado 80202

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■ FAX (720) 904-7970

August 21, 2007

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

RE: WV 7BD-23-8-21
Sec 23-T8S-R23E
Uintah Co, Utah

Mr. Davidson:

Newpark Drilling Fluids, LP is pleased to present the enclosed revised recommended drilling fluids program for the WV 7BD-23-8-21 well to be drilled in Uintah County, Utah.

The Surface Interval will be drilled with air to a depth of 500 ft.

For the Intermediate Interval, it is recommended to drill out with 3% KCL water pumping NewGel sweeps as needed for hole cleaning. At 5500-5600 ft or before drilling into the Wasatch @ 5779', mud up to a 3% KCL/Polymer system. Trona water flows in this area may require a mud weight of 9.5 ppg to control. Use this fluid to casing point at 8,500'

In the Liner interval, drill out with the fluid from the previous interval. Discontinue additions of KCL. Allow KCL to deplete through dilution allowing the system to convert to a NewPHPA/Polymer system. Mud weight in this interval is expected to be in the 12.0-12.5 range at the 12,100 ft liner interval T.D.

In the Production interval, displace to a 12.0-13.0 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 +/-15.0 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 7BD-23-8-21
Sec 23-T8S-R23E
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
2,563'	Green River Mahogeny	KCL/NewPHPA Hole size: 11.0" / Casing: 9 5/8" Flush Joint Drill out with water, adding KCL for 2-3%. Pump pre-hydrated NewGel sweeps for hole cleaning. For seepage, incorporate fine LCM into the NewGel sweeps. Begin mud up operations at +/- 5500 ft or before drilling into the Wasatch. It is recommended to have the KCL % at 3.0 or > before drilling into the Wasatch. Maintain the fluid loss at 8 mls with AquaBloc/NewPac. Maintain rheology control with NewEdge, CFL II, and DrillThin. Maintain hardness at 100 mg/l or > with lime/Gyp additions. As seepage is encountered, pump LCM sweeps as conditions dictate. Mud weight at T.D. is expected to be in the 9.4-9.5 ppg range	8.6	Vis (sec/qt): 28-40
5,883'	Wasatch		9.0	PV (cp): 0-12 YP (#s/100ft ²): 0-10 FL (ml/30 min): 8-10 LGS %: 3-5 pH: 10.0-10.5
8,500'	Intermediate T.D.		9.5	Cl (mg/l): 11-15K KCL %: 2.5-3.0
8,843'	Mesa Verde	NewPHPA Hole size: 8.5" / Liner: 7" Drill out, running fresh water, allowing the KCL % to drop. Maintain properties as recommended and increasing the PHPA concentration to 1.0 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.	9.8	Vis (sec/qt): 40-45
11,303'	Sego Bucktongue		10.4	PV (cp) : 12-20 YP (#s/100ft ²) : 10-12
11,423'	Castlegate Blackhawk Mancos Shale		11.4	FL (ml/30 min): 6-8
11,767'			11.6	LGS %: 3-5
12,202'			12.4	pH: 10.0-10.5 Cl (mg/l): 11-15K
12,300' +/-			Liner T.D.	KCL %: 0
12,618' MD	Mancos B	OptiDrill OBM Hole size: 7.0" / 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.	12.5	PV (cp): 25-35 YP (lbs/100ft ²): 8-10 HPHT (mls/30 min.): <20 O/W : 80:20 - 85:15 ES: 500+
15,265' MD	Frontier equiv. Dakota Silt Dakota		15.5	Lime: 2-4 ppb
16,181' MD				LGS %: < 6
16,458' MD	Total Depth		15.5	
16,875' MD				



Newpark Drilling Fluids, LP

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Project Summary

Questar
 Exploration & Production
 WV 7BD-23-8-21
 Sec 23-T8S-R23E
 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 ²)	API Fluid Loss (ml/30min)	Total Solids (%)
17 1/2 "	0-500'	NA	NA	NA	NA	NA

Intermediate Hole: KCL Water NewGel Sweeps - KCL/PHPA

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	API Fluid Loss (ml/30min)	KCL (%)	LGS Solids (%)
11"	500-5,500'	8.5-8.6	NA	NA	NA	2-3	< 1%
11 "	5,500'-8,500'	8.6-9.4	8-12	10-12	8-10	3.0	3-6

Liner Interval: NewPHPA

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	API Fluid Loss (ml/30min)	LGS Solids (%)
8 1/2 "	8,500'-12,300'	12.0-12.5	15-25	10-15	6-8	3-6

Production Interval: OptiDrill OBM

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	O/W Ratio (%)	HPHT Fluid Loss (ml/30min)	CaCL (ppm) X 10,000	Electrical Stability (mv)	LGS Solids (%)
7.0 "	12,300'-16,458'	15.0-15.5	25-35	8-12	85/15	12-15	250-350	500 +	3-6
6 1/8"	16,458'-16,875'	15.0-15.5	25-35	8-12	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.



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Intermediate Interval

11" Hole (500' - 8,500')

Questar
Exploration & Production
WV 7BD-23-8-21
Sec 23-T8S-R23E
Uintah, County Utah

Intermediate Interval Drilling Fluid Properties									
Depth Interval (TVD)	Mud Weight (ppg)	Viscosity (sec/qt)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	pH	API Fluid Loss (ml/30min)	Hardness (Mg/l)	Low Gravity Solids	KCL %
500'-5,500'	8.5-8.6	27-28	NA	NA	10.0-10.5	NA	100+	< 1.0	2.0-3.0
5,500'-8,500'	9.0-9.5	38-45	10-15	8-12	10.0-10.5	8-10	100+	3-6	3.0+

- Drill out mixing KCL for 3%. Pump pre-hydrated NewGel sweeps for additional hole cleaning and as hole conditions dictate. Add LCM to the sweeps for seepage.
- Mud up at 5,500 ft + to a KCL/Polymer system with properties as outlined above.
- If seepage is encountered, pump LCM sweeps as needed.
- Before drilling into the Wasatch, increase the KCL concentration to 3% or better.
- If Trona water is encountered, treat with Lime as needed for a 10.2 pH and 100 mg/l hardness.
- Mud weight at Intermediate T.D. is expected to be in the 9.2-9.4 ppg range.

Challenges:	Strategies:
Bit Balling	Use New Ease 203 (1-2 gal. down the drill pipe on connections) SAPP and Soap Sticks to prevent balling and to increase penetration rates.
Water Flows (Trona)	If water flows become excessive, mud up and increase mud weight as needed for control. Treat carbonate contamination with Lime/ Calcium Chloride as needed.
Lost Circulation	For seepage pump 50 bbl sweeps with 5-10 ppb DynaFiber and 10-20 ppb NewCarb as needed. For partial or total losses pump sweeps with 10-15 ppb FiberSeal and Cedar Fiber . If losses are not controlled with sweeps consider 10-15% LCM in active system. If losses are severe the use of a DynaPlug Squeeze is strongly recommended.
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)
Hole Instability/Sloughing Shale	Consider additions of Asphalt at 4-6 ppb and/or Potassium Silicate at 1-2 ppb.



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Intermediate Interval 11" Hole (500'- 8,500')

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Exploration & Production
WV 7BD-23-8-21
Sec 23-T8S-R23E
Utah, County Utah

Offset Data:

Some wells in this area have experienced losses in the Wasatch formation. LCM sweeps are strongly recommended for this reason. Mud weights should be kept as low as practical but increases to 9.5 ppg may be required to control the Trona Water flows which can be encountered from 3,000-4,000'.

Fluid Recommendations:

- Drill out cement, float collar and new formation. Test the integrity of the casing seat and squeeze if necessary.
- Close in pits and begin additions of **KCL**, **building to 3% before drilling the Wasatch**. Maintain **3% KCL** throughout the interval.
- If a Trona Water flow is encountered additions of **Lime** and/or **Calcium Chloride** should be used to adjust alkalinities as needed. An increase of mud weight to 9.5 may be necessary to control water flows in this area.
- The use of a premix tank is highly recommended. Pre-Hydrate **NewGel** for use as sweeps and for viscosity when a mud up is started at +/- 4,000'. 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 **3% KCL** water for viscosity and rheology control.
- At 5,500'-6,000' (or before drilling into the Wasatch formation) begin a mud up. Add pre-hydrated **NewGel** from the premix tank to the active system to increase funnel viscosity to 35-40 sec/qt. Maintain viscosity with pre-hydrated **NewGel** as needed. The system should be monitored and additions of **KCL** be adjusted to maintain **3% KCL**.
- Rheology can be enhanced with additions of .25-1.0 ppb **Flowzan** as needed.
- Reduce Fluid Loss to 8-10CC/30min with additions of 0.5-1.0 ppb **NewPAC** and/or 2-4 ppb **Aqua Bloc** by 5,500' and lower to 6-8 CC/30min prior to TD at 11,900'.
- 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**"
- If an increase in mud weight is necessary 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 losses become severe, LCM sweeps of **Cedar Fiber** and **FiberSeal** should be considered 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.



Newpark Drilling Fluids, LP

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

Liner Interval

8 1/2" Hole (8,500' - 12,300')

Questar
Exploration & Production
WV 7BD-23-8-21
Sec 23-T8S-R23E
Uintah, County Utah

Liner Interval Drilling Fluid Properties								
Depth Interval (TVD)	Mud Weight (ppg)	Viscosity (sec/qt)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	pH	API Fluid Loss (ml/30min)	Hardness (Mg/l)	Low Gravity Solids
8,500' - 12,300'	12.0-12.5	40-50	18-25	10-15	10.0-10.5	6-8	100+	3-6

- After drilling out discontinue additions of KCL, allowing 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 12.0-12.5 ppg range.

<i>Challenges:</i>	<i>Strategies:</i>
Hole Instability/Sloughing Shale	Consider 4-6 ppb Asphalt
Increase in Formation pressure	Monitor well conditions and increase density as needed with NewBar 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 DynaFiber and 10-20 ppb NewCarb as needed. For partial or total losses pump sweeps with 10-15 ppb FiberSeal and Cedar Fiber . 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 DynaPlug 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)



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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 increase to 12.5 ppg may be required by Liner TD at 12,300'.

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.
- Discontinue additions of **KCL**. Allow **KCL** to naturally dissipate by dilution with fresh water. 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.



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Production Interval

6 1/8" Hole (12,300'-16,875')

Questar
Exploration & Production
WV 7BD-23-8-21
Sec 23-T8S-R23E
Uintah, County Utah

Production Interval Drilling Fluid Properties

Depth Interval (TVD)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	O/W Ratio %	HTHP Fluid Loss (ml/30min)	Excess Lime (PPB)	Electrical Stability (MV)	Low Gravity Solids	CaCl Mg/l Water
12,300'-16,875'	15.0-15.5	25-35	8-10	85:15	12-15	2-4	500+	< 6	300K

Drilling Fluid Recommendations: (12,300'-16,875')

- Displace to a OptiDrill OBM after finishing the liner job at 12,100'.
- 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"> • Have 1200-1300 bbls of OBM volume on location along with a pump capable of keeping up with displacement rates. • Pump a 10-20 bbl viscosified OBM spacer ahead of the OptiDrill (enough for 500 ft + separation) • A steady pump rate for either turbulent or plug flow should be used. Reciprocate and rotate to assist in minimizing channeling. • Do not shut down once displacement commences. • Should any contamination occur, isolate the contaminated fluid for reconditioning.
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"> • Spot weighted pills calculated to give a bottom hole pressure equal to drilling ECD. • Do not exceed drilling bottom hole pressure with the ECD pill. Lost circulation has been a problem on offset wells. • Stage weighted pills out of the hole and recover for future use.



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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.



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Production Interval
6 1/8" Hole (12,300' - 16,875')

Questar
Exploration & Production
WV 7BD-23-8-21
Sec 23-T8S-R23E
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Recommended materials for relaxed filtrate OptiDrill system :
(85:15 Oil/Water Ratio)

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



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OILFIELD WASTE MANAGEMENT PROPOSAL

For

Questar Market Resources

SOLI-BOND® Processing and Disposal of Drilling Waste

Batch Treatment

Wells: WV 7BD-23-8-21

Section 23

T8S – R21E

Uintah County, Utah

Prepared For: Jon Gent
Region Drilling Manager
Questar Market Resources
1050 17th Street, Suite 500
Denver, Colorado 80265
(303) 672-6927

Prepared By: Robert J. Wilson
Technical Sales Representative
Soli-Bond, Inc.
(303) 579-9800

CONFIDENTIALITY NOTICE:

Unless otherwise indicated or obvious from the Proposal, the information contained in this Proposal is privileged and confidential, intended for the use of the individual or entity named above. Dissemination, distribution or copying of this document is strictly prohibited.

SOLI-BOND® Processing and Disposal of Drilling Waste
BATCH TREATMENT
QUESTAR • WV 7BD-23-8-21
Uintah County, Utah

OVERVIEW

Soli-Bond, Inc. (SBI) proposes to utilize the SOLI-BOND® Process for the treatment of **Drilling Waste** on the **WV 7BD-23-8-21** in Uintah County, Utah, which will be followed by onsite disposal of the processed material.

This proposal will serve to delineate the specifications and criteria for achieving the project objectives as required by **Questar Market Resources** (Client) and the appropriate regulatory entities.

GENERAL DESCRIPTION OF THE SOLI-BOND® PROCESS

The SOLI-BOND® Process involves the controlled addition of a non-toxic, chemically reactive, portland-cement-based reagent or reagents to a waste, followed by the mixing of the reagent with the waste to form homogeneous slurry similar to viscous mortar. Oily substances that may be present in the waste are broken up into small droplets or particles and dispersed throughout the reagent/waste mixture during the mixing phase of the process. After the mixing phase, an irreversible chemical reaction begins to occur between the reagent and water present (or added) in the waste, ultimately causing the reagent/waste mixture to be transformed into a solid granular material with a “soil-like” consistency, typically within 48 hours after processing. Any dispersed particles of oily substances within the processed material are *physically* locked in place or “micro-encapsulated” in their isolated state inside the reacted cementitious matrix, preventing them from re-coalescing and suddenly being released to the environment at significant rates. The same irreversible reaction *chemically* stabilizes various metals that may be present in the waste, primarily by transforming them into less soluble metal hydroxides and other chemical species, thus greatly reducing their mobility and availability to the surrounding environment as well. In summary The SOLI-BOND® Process reduces the leaching rate of target constituents of concern from a waste form to such a degree that they can no longer cause harm to health or the environment. The SOLI-BOND® Process is a waste treatment method more generally known as Solidification/Stabilization (S/S). S/S has been recognized and prescribed by the United States Environmental Protection Agency for many years as an effective technology for the treatment of waste containing various metals as well as non-volatile and semi-volatile organic substances.

INNOCUOUS WASTE APPLICATIONS

The SOLI-BOND® Process can also be applied to solidify innocuous oilfield wastes such as spent water based drilling fluids and physically unstable water based drill cuttings to avoid the increased difficulties typically associated with the disposal of liquid or semi-solid wastes. Irreversibly transforming the *physical* properties of an innocuous waste, from a liquid or semi-solid state that’s structurally unstable, into a solid, granular material with load bearing capability, can be the sole reason for using The SOLI-BOND® Process. In addition, the chemically driven transformation into a dry solid occurs quickly, with minimal volume addition and the process can accommodate waste with high fluid content. For oilfield waste pit applications, the process provides more rapid solidification of the pit contents, more room for the prescribed depth of soil cover and can greatly reduce the waiting period for the pit contents to dry sufficiently for pit closure as opposed to that required for conventional closure methods.

SOLI-BOND® Processing and Disposal of Drilling Waste
BATCH TREATMENT
QUESTAR • WV 7BD-23-8-21
Uintah County, Utah

SITE AND APPLICATION DESCRIPTION

The subject work site is an area constructed for the drilling and production of the gas well covered in this proposal. The well plan contemplates the use of an oilbase drilling fluid during the drilling of the production section of the well. As this section of the well is drilled, cuttings will be generated, transported to the surface within the drilling fluid, then mechanically separated from the drilling fluid as waste. These separated cuttings are expected to contain elevated levels of adhered/absorbed hydrocarbons due to their prior contact with the oilbase drilling fluid. These “oilbase cuttings” will be collected in steel catch tanks provided by the Client as drilling progresses and then placed in the separate oil base cuttings pit.

In addition to the “oilbase cuttings” described above, oily waste fluids and sediments may be generated at the work site during drilling operations and after drilling is completed the drilling fluid containment system will be cleaned thus generating some oily cleaning waste as well. It is these oilbase cuttings, waste fluids and sediments and cleaning waste that comprise all the waste to be treated and disposed of under this proposal.

Based on Client information and allowing for well bore washout, decompression/expansion of the drilled cuttings and the adhered/absorbed drilling fluids (“WEF”), the total volume of waste to treat was estimated as follows:

WV 7BD-23-8-21

4,575 feet of 6.125 inch diameter hole x WEF factor of 3:	500
Estimated additional sediments and cleaning waste:	<u>10,500</u>
Total Estimated Barrels of Waste to Treat:	11,000

SBI proposes to apply the SOLI-BOND® Process to the oilbase cuttings and other indicated waste from the well during drilling operations to achieve the following objectives:

- Permanently reduce the leaching rate of target constituents of concern from the treated material to within prescribed limits.
- Irreversibly solidify the physically unstable waste to allow onsite disposal and support of soil cover without subsidence.
- Accomplish treatment with minimal volume addition to minimize disposal cell size and facilitate required minimum space for soil cover.
- Achieve rapid solidification of the waste to allow prompt final disposal.

PRELIMINARY ACTIVITIES

SBI personnel collected a sample of waste similar in characteristics to the waste to be generated on the subject project. The waste sample was used to conduct bench scale SOLI-BOND® processing, which has been carried out to determine effective reagent formulations, reagent/waste mix ratios, pricing and other aspects of this proposal.

OPERATIONAL PLAN

SBI jobsite operations will be conducted as follows:

SOLI-BOND® Processing and Disposal of Drilling Waste
BATCH TREATMENT
QUESTAR • WV 7BD-23-8-21
Uintah County, Utah

- After drilling the oilbase section of the well, SBI will install the SOLI-BOND® Waste Processing System at the well site. The “oilbase cuttings” will be treated “in-situ” in the existing lined pit.
- SBI will mobilize personnel to the jobsite to process the waste that has accumulated in the lined oil base cuttings pit.
- Upon arrival at the jobsite, the SBI Site Foreman will conduct a Jobsite Safety Assessment with SBI crew, discussing all potential jobsite safety hazards, required personal safety gear and accident avoidance and conduct safety meetings with SBI crew prior to each day’s work throughout the project.
- SBI and Client Representative will verify the volume of waste to treat in each batch prior to process operations.
- SBI crew will then process the waste with the SOLI-BOND® Waste Processing System.
- Waste processing will be preformed during eight (8) hour daylight shifts. After daily onsite process operations are completed SBI personnel will prepare a SBI field ticket for Client Representative signature, indicating the volume of waste processed (in barrels).
- Components of The SOLI-BOND® Waste Processing System may remain at the jobsite until all waste to treat has been processed.
- After all waste is processed from the well, a composite sample of the processed material will be collected for laboratory analysis to verify that it complies with criteria under the section herein entitled “Performance Criteria.”
- SBI will utilize the existing lined pit as an on-site disposal cell sized to accommodate the processed oilbase cuttings and four (4) feet of soil cover after final reclamation of the drill site. Client has provided a plastic liner for the disposal cell, including installation. After achievement of performance criteria is verified, SBI will backfill the cell to the adjacent surface elevation thus constituting final disposal of the processed material. SBI will then demobilize equipment and personnel thus concluding SBI’s onsite operations.
- A SBI Waste Treatment and Disposal Report suitable for submittal to the appropriate regulatory agencies will then be prepared documenting all pertinent aspects of the project and will be submitted to the Client.

PERFORMANCE CRITERIA

The treated waste will comply with the following criteria:

1. Leachable Oil and Grease less than 10 mg/L.
2. Leachable Total Dissolved Solids to be less than 5000 mg/L and/or leachable salts below acceptable site-specific guidelines.

Compliance with the performance criteria will be certified by an accredited testing laboratory utilizing the appropriate tests as prescribed and will be documented in a final report submitted to Client and the appropriate regulatory agencies as required.

SCHEDULE (All time/days are estimates and may change due to jobsite conditions)

SOLI-BOND® Processing and Disposal of Drilling Waste
BATCH TREATMENT
 QUESTAR • WV 7BD-23-8-21
 Uintah County, Utah

ITEM / SERVICE (Based on estimated 11,000 total barrels of waste to process)	ESTIMATED DAYS
Mobilization And Setup	1
Estimated SOLI-BOND® PWD Waste Processing System Rental Days	15
Process Material, Backfill Cell	12
Takedown and Demobilization	1

ITEMS FURNISHED with SOLI-BOND® PWD Waste Processing System

Equipment

- SB-2-7 Processor
- SOLI-BOND® Reagent Storage Silo w/ Discharge Auger
- Back Hoe Loader
- Ancillary Equipment
- First Aid and Safety Equipment
- SBI Crew Transportation

Personnel

- *SBI Site Foreman*
- *SBI Operator Material*
- Fuel necessary to operate Soli-Bond’s motorized equipment.

Miscellaneous

- SBI Equipment Cleaning.
- One Laboratory Analysis of Processed Material. (for parameters indicated herein)
- SBI Waste Treatment and Disposal Report.

CLIENT RESPONSIBILITY

- Client will provide SBI with a written work order or other Client recognized document to contract SBI to perform the work as described herein.
- Client will provide SBI with a list of any Client requirements related to performing and being compensated for the work described herein.
- Client will provide “all weather” ingress and egress to the site.
- Client will provide process add-mix water.
- Client agrees that delays or interruptions in SBI’s work described herein caused by “Acts of Nature” or events under the responsibility of the Client or Client contractors (excluding SBI and it’s contractors) may result in additional charges to Client.

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.

5. Lease Serial No.
UTU-0809

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

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

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

1. Type of Well
 Oil Well Gas Well Other

8. Well Name and No.
WV 7BD-23-8-21

2. Name of Operator
QUESTAR EXPLORATION & PRODUCTION, CO.

9. API Well No.
43-047-39044

3a. Address **11002 E. 17500 S. VERNAL, UT 84078**
3b. Phone No. (include area code) **435-781-4331**

10. Field and Pool, or Exploratory Area
WONSITS VALLEY

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1418' FNL 2559' FEL SWNE SECTION 23, T8S, R21E

11. County or Parish, State
UINTAH

12. 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	<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 PROGRAM 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 6,000' 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 AT (303) 308-3090.

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

COPY SENT TO OPERATOR

Name (Printed/Typed)

Jan Nelson

Signature

Title

Regulatory Affairs

Date

January 21, 2008

Date: **2-7-2008**

Initials: **KS**

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

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

**Accepted by the
Utah Division of**

Office

Oil, Gas and Mining

Date

Federal Approval Of This
Action Is Necessary

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)

RECEIVED

JAN 25 2008

CONFIDENTIAL

DIV. OF OIL, GAS & MINING

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	2,563'
Wasatch	5,883'
Mesaverde	8,843'
Sego	11,303'
Castlegate	11,423'
Blackhawk	11,767'
Mancos Shale	12,202'
Mancos B	12,618'
Frontier	15,265'
Dakota Silt	16,181'
Dakota	16,458'
TD	16,875'

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	5,883'
Gas	Mesaverde	8,843'
Gas	Blackhawk	11,767'
Gas	Mancos Shale	12,202'
Gas	Mancos B	12,618'
Gas	Dakota	16,458'

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.

DRILLING PROGRAM

4. **Casing Design:**

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	6000'	47	HCP-110	Flush Jnt **	New
8-1/2"	7"	sfc	12,300'	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'	16,875'	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***	18,130 psi	493,000 lb.

* Special Drift

** Flush Jnt – VAM SLIJ II or LT&C based on availability

MINIMUM DESIGN FACTORS:

COLLAPSE: 1.125 – 1.3***
 BURST: 1.10
 TENSION: 1.80

DRILLING PROGRAM

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.

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

- A. Cores – none anticipated

DRILLING PROGRAM

- 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% CaCl₂
Slurry wt: 15.6 ppg, slurry yield: 1.20 ft³/sx, slurry volume: 17-1/2" hole + 100% excess.

9-5/8" Intermediate Casing: sfc – 6,000' (MD)

Lead Slurry: 0' – 5,600'. 1206 sks (foamed) (2368 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 ft³/sk (unfoamed), Slurry volume: 12-1/4" hole + 35 % excess.

Tail Slurry: 5,600' – 6,000'. 115 sks (169.1 cu ft) 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 ft³/sk, Slurry volume: 12-1/4" hole + 35% excess.

7" Intermediate Casing: 5,000 - 12,300' (MD)

Foamed Lead Slurry 2: 5,000' – 12,300'. 728 sks (1157 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 ft³/sk, Slurry volume: 8-1/2" hole + 25% excess.

4-1/2" Production Casing: sfc – 16,875' (MD)

Lead/Tail Slurry: 5,500 - 16,875'. 970 sks (1446 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 ft³/sk, Slurry volume: 6-1/8" hole + 35% 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 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 H₂S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 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. **ADDITIONAL INFORMATION FOR OIL BASE MUD:**

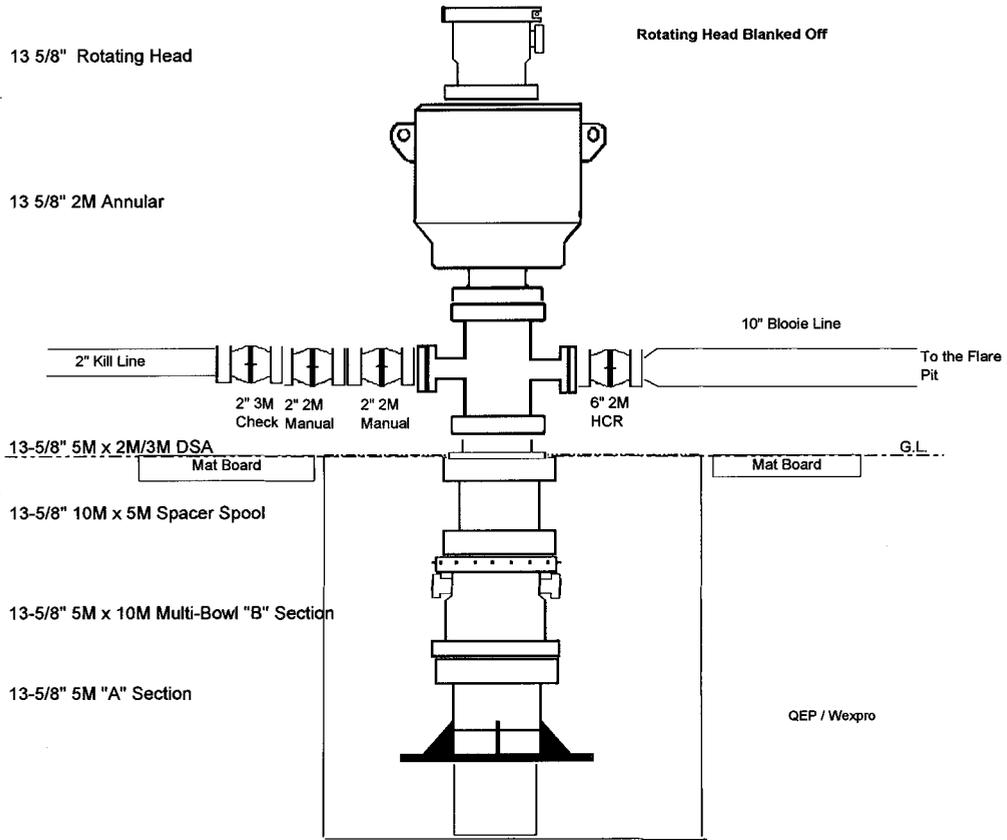
A. See attached diagram of well pad layout. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 30 millimeters thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. At the beginning of drilling operations this reserve pit will have an open-ended dike placed in the pit that allows the fluids to migrate from one side of the pit to the other during the drilling of the surface and intermediate hole using water based mud. At the time that operations begin to drill the production hole with oil base mud, this dike will be extended, dividing the pit into two distinct, isolated halves allowing no migration of fluids from one side to the other. At that time all fluids will be removed from the end of the pit to be used as a cuttings pit. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.

B. Oil-base mud will be mixed in the closed circulating system and transferred to four 500-bbl tanks on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be collected in a steel catch tank once they leave the closed circulating system and transported and placed into the cuttings half of the reserve pit.

DRILLING PROGRAM

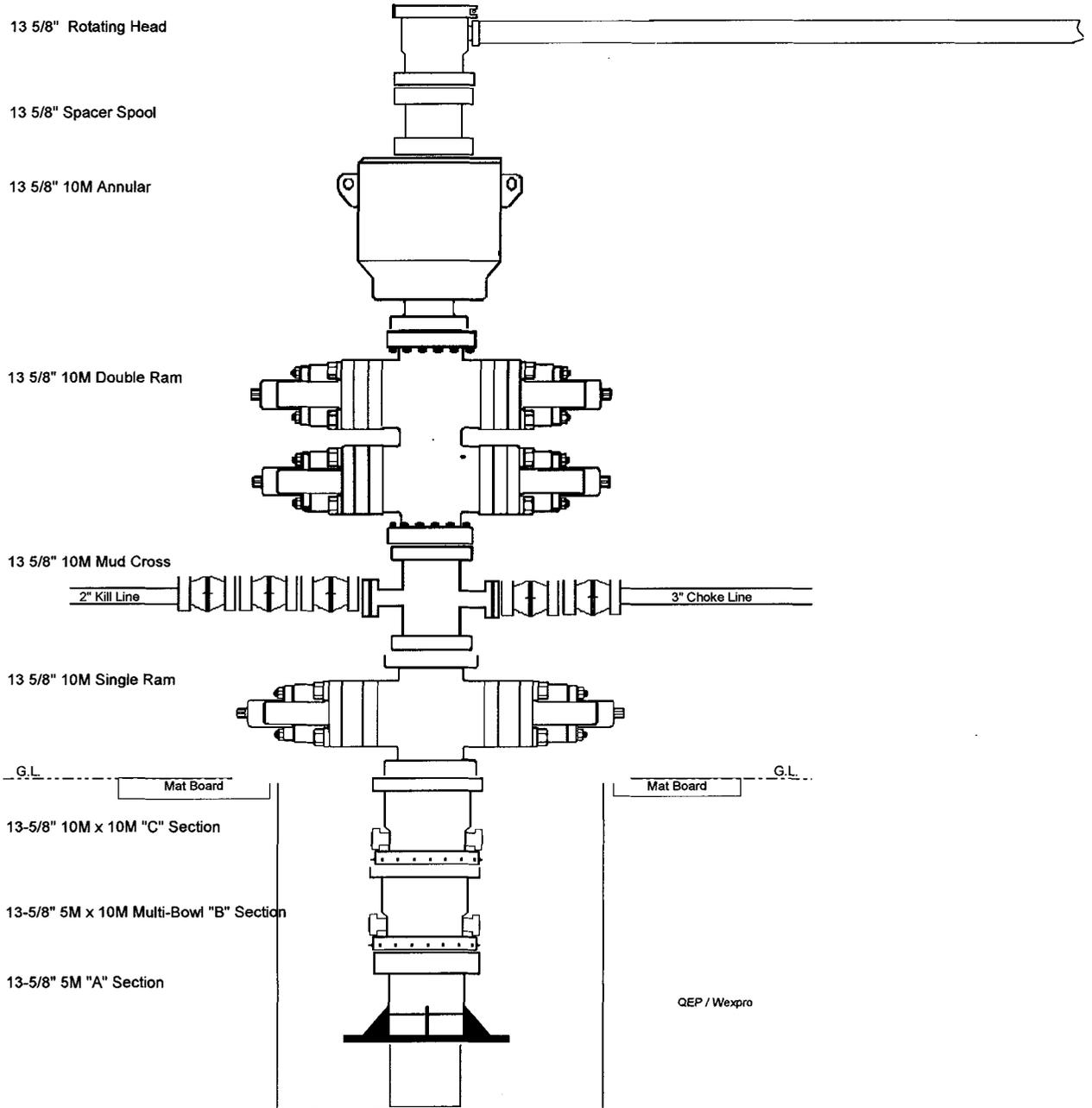
- C.** Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings half of the pit.
- D.** All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.
- E.** Once all waste has been placed in the cuttings portion of the pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings side of the pit and that portion of the pit area will be returned to the existing grade bordering the pit. Please see the attached Soli-Bond Proposal for Processing and Disposal of Drilling Waste for specific details. The half of the reserve pit containing water base materials will be left to evaporate and will be closed and reclaimed at the time that portion of the pit is dry.

DRILLING PROGRAM

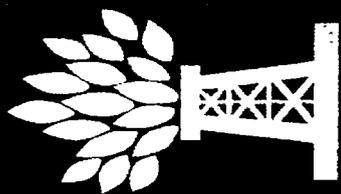


QUESTAR / WEXPRO
2M BOPE for Air / Aerated drilling to 6500' in Unita Basin
Minimum Requirements

DRILLING PROGRAM



QUESTAR / WEXPRO
10M BOP x 10M Annular for Deep Uinta Basin
Minimum Requirements



NEWPARK

DRILLING FLUIDS, LLC

**Questar
Exploration &
Production Company**

WV 7BD-23-8-21

***Sec 23-T8S-R21E
Uintah County, Utah***

Drilling Fluids Program

***410 17th Street, Suite 460 Denver, CO 80202
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Newpark Drilling Fluids, LP

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■ 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 7BD-23-8-21
Sec 23-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 7BD-23-8-21 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 6,000' 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 12,300 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 7BD-23-8-21
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
2,563'	Green River Mahogeny	Aerated Salt Water 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	Vis (sec/qt): Water PV (cp): NA YP (#s/100ft ²): NA FL (ml/30 min): NC LGS %: < 1% pH: 10.5-10.8 Cl (mg/l): 150-200K
5,883'	Wasatch 1st Intermediate T.D.		9.5-10.0	
6,000'				
8,843'	Mesa Verde	NewPHPA/Polymer Hole size: 8.5" / Liner: 7" Mud up as hole conditions dictate to a NewPHPA/ Polymer system. Maintain properties as outlined in-creasing 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 con-sider adding Asphalt if hole conditions dictate.	8.8	Vis (sec/qt): 40-45 PV (cp) : 12-20 YP (#s/100ft ²) : 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
11,303'	Sego Bucktongue		10.0	
11,423'	Castlegate		11.0	
11,767'	Blackhawk		11.2	
12,202'	Mancos Shale		11.2	
12,300'+/-	2nd Intermediate T.D.			
12,618'	Mancos B	OptiDrill OBM 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	PV (cp): 15-25 YP (lbs/100ft ²): 8-10 HPHT (mls/30 min.): <20 O/W : 80:20 - 85:15 ES: 500+ Lime: 2-4 ppb LGS %: < 6
15265'	Frontier equiv.		15.5	
16,181'	Dakota Silt			
16,458'	Dakota			
16,875'	Total Depth			



Newpark Drilling Fluids, LP

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Project Summary

Questar
 Exploration & Production
WV 7BD-23-8-21
 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 ²)	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 ²)	API Fluid Loss (ml/30min)	Chloride Mg/l (x1000)	LGS Solids (%)
11"	500'-6,000'	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 ²)	API Fluid Loss (ml/30min)	pH	LGS Solids (%)
8 1/2"	6,000'-8,000'	8.5-8.8	6-12	6-10	8-10	10.0-11.0	< 1%
8 1/2 "	8,000'-12,300'	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 ²)	O/W Ratio (%)	HPHT Fluid Loss (ml/30min)	CaCL (mg/l) X 10,000	Electrical Stability (mv)	LGS Solids (%)
6-1/8 "	12,300'-16,875'	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.



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1st Intermediate Interval

11" Hole (500' - 6,000')

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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/100ft²)	pH	API Fluid Loss (ml/30min)	Hardness (Mg/l)	Low Gravity Solids	Chlorides (Mg/l x1000)
500'-6,000'+/-	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.

Challenges:	Strategies:
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.



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1st Intermediate Interval

11" Hole (500'- 6,000')

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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 6,000' (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.



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2nd Intermediate Interval

8 1/2" Hole (6,000' - 12,300')

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WV 7BD-23-8-21
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 ²)	pH	API Fluid Loss (ml/30min)	Hardness Mg/l)	Low Gravity Solids
6,000'-8,000'	8.6-8.8	32-36	6-12	6-10	10.0-11.0	8-10	100+	4-6
8,000'-12,300'	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.

<i>Challenges:</i>	<i>Strategies:</i>
Hole Instability/Sloughing Shale	Consider 4-6 ppb Asphalt
Increase in Formation pressure	Monitor well conditions and increase density as needed with NewBar 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 DynaFiber and 10-20 ppb NewCarb as needed. For partial or total losses pump sweeps with 10-15 ppb FiberSeal and Cedar Fiber . 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 DynaPlug 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 (6,000'-12,300')

Questar
Exploration & Production
WV 7BD-23-8-21
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 12,300'.

- 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 (12,300'-16,875')

Questar
Exploration & Production
WV 7BD-23-8-21
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 ²)	O/W Ratio %	HTHP Fluid Loss (ml/30min)	Excess Lime (PPB)	Electrical Stability (MV)	Low Gravity Solids	CaCl Mg/l Water
12,300'-16,875'	15.0-15.5	25-35	8-10	85:15	12-15	2-4	500+	< 6	300K

Drilling Fluid Recommendations: (12,300'-16,875')

- Displace to a OptiDrill OBM after finishing the casing job at 12,300'.
- 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"> • Have 1200-1300 bbls of OBM volume on location along with a pump capable of keeping up with displacement rates. • Pump a 10-20 bbl viscosified OBM spacer ahead of the OptiDrill (enough for 500 ft + separation) • A steady pump rate for either turbulent or plug flow should be used. Reciprocate and rotate to assist in minimizing channeling. • Do not shut down once displacement commences. • Should any contamination occur, isolate the contaminated fluid for reconditioning.
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"> • Spot weighted pills calculated to give a bottom hole pressure equal to drilling ECD. • Do not exceed drilling bottom hole pressure with the ECD pill. Lost circulation has been a problem on offset wells. • Stage weighted pills out of the hole and recover for future use.



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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.



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Production Interval
6 1/8" Hole (12,300'-16,875')

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Exploration & Production
WV 7BD-23-8-21
Sec 23-T8S-R21E
Uintah, County Utah

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

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



Newpark Drilling Fluids, LP
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OILFIELD WASTE MANAGEMENT PROPOSAL

For

Questar Market Resources

SOLI-BOND® Processing and Disposal of Drilling Waste

Batch Treatment

Wells: WV 7BD-23-8-21

Section 23

T8S – R21E

Uintah County, Utah

Prepared For: Jon Gent
Region Drilling Manager
Questar Market Resources
1050 17th Street, Suite 500
Denver, Colorado 80265
(303) 672-6927

Prepared By: Robert J. Wilson
Technical Sales Representative
Soli-Bond, Inc.
(303) 579-9800

CONFIDENTIALITY NOTICE:

Unless otherwise indicated or obvious from the Proposal, the information contained in this Proposal is privileged and confidential, intended for the use of the individual or entity named above. Dissemination, distribution or copying of this document is strictly prohibited.

SOLI-BOND® Processing and Disposal of Drilling Waste
BATCH TREATMENT
QUESTAR • RW 34-27ADR
Uintah County, Utah

OVERVIEW

Soli-Bond, Inc. (SBI) proposes to utilize the SOLI-BOND® Process for the treatment of **Drilling Waste** on the **WV 7BD-23-8-21** in Uintah County, Utah, which will be followed by onsite disposal of the processed material.

This proposal will serve to delineate the specifications and criteria for achieving the project objectives as required by **Questar Market Resources (Client)** and the appropriate regulatory entities.

GENERAL DESCRIPTION OF THE SOLI-BOND® PROCESS

The SOLI-BOND® Process involves the controlled addition of a non-toxic, chemically reactive, portland-cement-based reagent or reagents to a waste, followed by the mixing of the reagent with the waste to form homogeneous slurry similar to viscous mortar. Oily substances that may be present in the waste are broken up into small droplets or particles and dispersed throughout the reagent/waste mixture during the mixing phase of the process. After the mixing phase, an irreversible chemical reaction begins to occur between the reagent and water present (or added) in the waste, ultimately causing the reagent/waste mixture to be transformed into a solid granular material with a “soil-like” consistency, typically within 48 hours after processing. Any dispersed particles of oily substances within the processed material are *physically* locked in place or “micro-encapsulated” in their isolated state inside the reacted cementitious matrix, preventing them from re-coalescing and suddenly being released to the environment at significant rates. The same irreversible reaction *chemically* stabilizes various metals that may be present in the waste, primarily by transforming them into less soluble metal hydroxides and other chemical species, thus greatly reducing their mobility and availability to the surrounding environment as well. In summary The SOLI-BOND® Process reduces the leaching rate of target constituents of concern from a waste form to such a degree that they can no longer cause harm to health or the environment. The SOLI-BOND® Process is a waste treatment method more generally known as Solidification/Stabilization (S/S). S/S has been recognized and prescribed by the United States Environmental Protection Agency for many years as an effective technology for the treatment of waste containing various metals as well as non-volatile and semi-volatile organic substances.

INNOCUOUS WASTE APPLICATIONS

The SOLI-BOND® Process can also be applied to solidify innocuous oilfield wastes such as spent water based drilling fluids and physically unstable water based drill cuttings to avoid the increased difficulties typically associated with the disposal of liquid or semi-solid wastes. Irreversibly transforming the *physical* properties of an innocuous waste, from a liquid or semi-solid state that’s structurally unstable, into a solid, granular material with load bearing capability, can be the sole reason for using The SOLI-BOND® Process. In addition, the chemically driven transformation into a dry solid occurs quickly, with minimal volume addition and the process can accommodate waste with high fluid content. For oilfield waste pit applications, the process provides more rapid solidification of the pit contents, more room for the prescribed depth of soil cover and can greatly reduce the waiting period for the pit contents to dry sufficiently for pit closure as opposed to that required for conventional closure methods.

SOLI-BOND® Processing and Disposal of Drilling Waste
BATCH TREATMENT
QUESTAR • RW 34-27ADR
Uintah County, Utah

SITE AND APPLICATION DESCRIPTION

The subject work site is an area constructed for the drilling and production of the gas well covered in this proposal. The well plan contemplates the use of an oilbase drilling fluid during the drilling of the production section of the well. As this section of the well is drilled, cuttings will be generated, transported to the surface within the drilling fluid, then mechanically separated from the drilling fluid as waste. These separated cuttings are expected to contain elevated levels of adhered/absorbed hydrocarbons due to their prior contact with the oilbase drilling fluid. These “oilbase cuttings” will be collected in steel catch tanks provided by the Client as drilling progresses and then placed in the separate oil base cuttings pit.

In addition to the “oilbase cuttings” described above, oily waste fluids and sediments may be generated at the work site during drilling operations and after drilling is completed the drilling fluid containment system will be cleaned thus generating some oily cleaning waste as well. It is these oilbase cuttings, waste fluids and sediments and cleaning waste that comprise all the waste to be treated and disposed of under this proposal.

Based on Client information and allowing for well bore washout, decompression/expansion of the drilled cuttings and the adhered/absorbed drilling fluids (“WEF”), the total volume of waste to treat was estimated as follows:

WV 7BD-23-8-21

4,575 feet of 6.125 inch diameter hole x WEF factor of 3:	500
Estimated additional sediments and cleaning waste:	<u>10,500</u>
Total Estimated Barrels of Waste to Treat:	11,000

SBI proposes to apply the SOLI-BOND® Process to the oilbase cuttings and other indicated waste from the well during drilling operations to achieve the following objectives:

- Permanently reduce the leaching rate of target constituents of concern from the treated material to within prescribed limits.
- Irreversibly solidify the physically unstable waste to allow onsite disposal and support of soil cover without subsidence.
- Accomplish treatment with minimal volume addition to minimize disposal cell size and facilitate required minimum space for soil cover.
- Achieve rapid solidification of the waste to allow prompt final disposal.

PRELIMINARY ACTIVITIES

SBI personnel collected a sample of waste similar in characteristics to the waste to be generated on the subject project. The waste sample was used to conduct bench scale SOLI-BOND® processing, which has been carried out to determine effective reagent formulations, reagent/waste mix ratios, pricing and other aspects of this proposal.

SOLI-BOND® Processing and Disposal of Drilling Waste
BATCH TREATMENT
QUESTAR • RW 34-27ADR
Uintah County, Utah

OPERATIONAL PLAN

SBI jobsite operations will be conducted as follows:

- After drilling the oilbase section of the well, SBI will install the SOLI-BOND® Waste Processing System at the well site. The “oilbase cuttings” will be treated “in-situ” in the existing lined pit.
- SBI will mobilize personnel to the jobsite to process the waste that has accumulated in the lined oil base cuttings pit.
- Upon arrival at the jobsite, the SBI Site Foreman will conduct a Jobsite Safety Assessment with SBI crew, discussing all potential jobsite safety hazards, required personal safety gear and accident avoidance and conduct safety meetings with SBI crew prior to each day’s work throughout the project.
- SBI and Client Representative will verify the volume of waste to treat in each batch prior to process operations.
- SBI crew will then process the waste with the SOLI-BOND® Waste Processing System.
- Waste processing will be preformed during eight (8) hour daylight shifts. After daily onsite process operations are completed SBI personnel will prepare a SBI field ticket for Client Representative signature, indicating the volume of waste processed (in barrels).
- Components of The SOLI-BOND® Waste Processing System may remain at the jobsite until all waste to treat has been processed.
- After all waste is processed from the well, a composite sample of the processed material will be collected for laboratory analysis to verify that it complies with criteria under the section herein entitled “Performance Criteria.”
- SBI will utilize the existing lined pit as an on-site disposal cell sized to accommodate the processed oilbase cuttings and four (4) feet of soil cover after final reclamation of the drill site. Client has provided a plastic liner for the disposal cell, including installation. After achievement of performance criteria is verified, SBI will backfill the cell to the adjacent surface elevation thus constituting final disposal of the processed material. SBI will then demobilize equipment and personnel thus concluding SBI’s onsite operations.
- A SBI Waste Treatment and Disposal Report suitable for submittal to the appropriate regulatory agencies will then be prepared documenting all pertinent aspects of the project and will be submitted to the Client.

PERFORMANCE CRITERIA

The treated waste will comply with the following criteria:

1. Leachable Oil and Grease less than 10 mg/L.
2. Leachable Total Dissolved Solids to be less than 5000 mg/L and/or leachable salts below acceptable site-specific guidelines.

Compliance with the performance criteria will be certified by an accredited testing laboratory utilizing the appropriate tests as prescribed and will be documented in a final report submitted to Client and the appropriate regulatory agencies as required.

SOLI-BOND® Processing and Disposal of Drilling Waste
BATCH TREATMENT
 QUESTAR • RW 34-27ADR
 Uintah County, Utah

SCHEDULE (All time/days are estimates and may change due to jobsite conditions)

ITEM / SERVICE (Based on estimated 11,000 total barrels of waste to process)	ESTIMATED DAYS
Mobilization And Setup	1
Estimated SOLI-BOND® PWD Waste Processing System Rental Days	15
Process Material, Backfill Cell	12
Takedown and Demobilization	1

ITEMS FURNISHED with SOLI-BOND® PWD Waste Processing System

Equipment

- SB-2-7 Processor
- SOLI-BOND® Reagent Storage Silo w/ Discharge Auger
- Back Hoe Loader
- Ancillary Equipment
- First Aid and Safety Equipment
- SBI Crew Transportation

Personnel

- *SBI Site Foreman*
- *SBI Operator Material*
- Fuel necessary to operate Soli-Bond's motorized equipment.

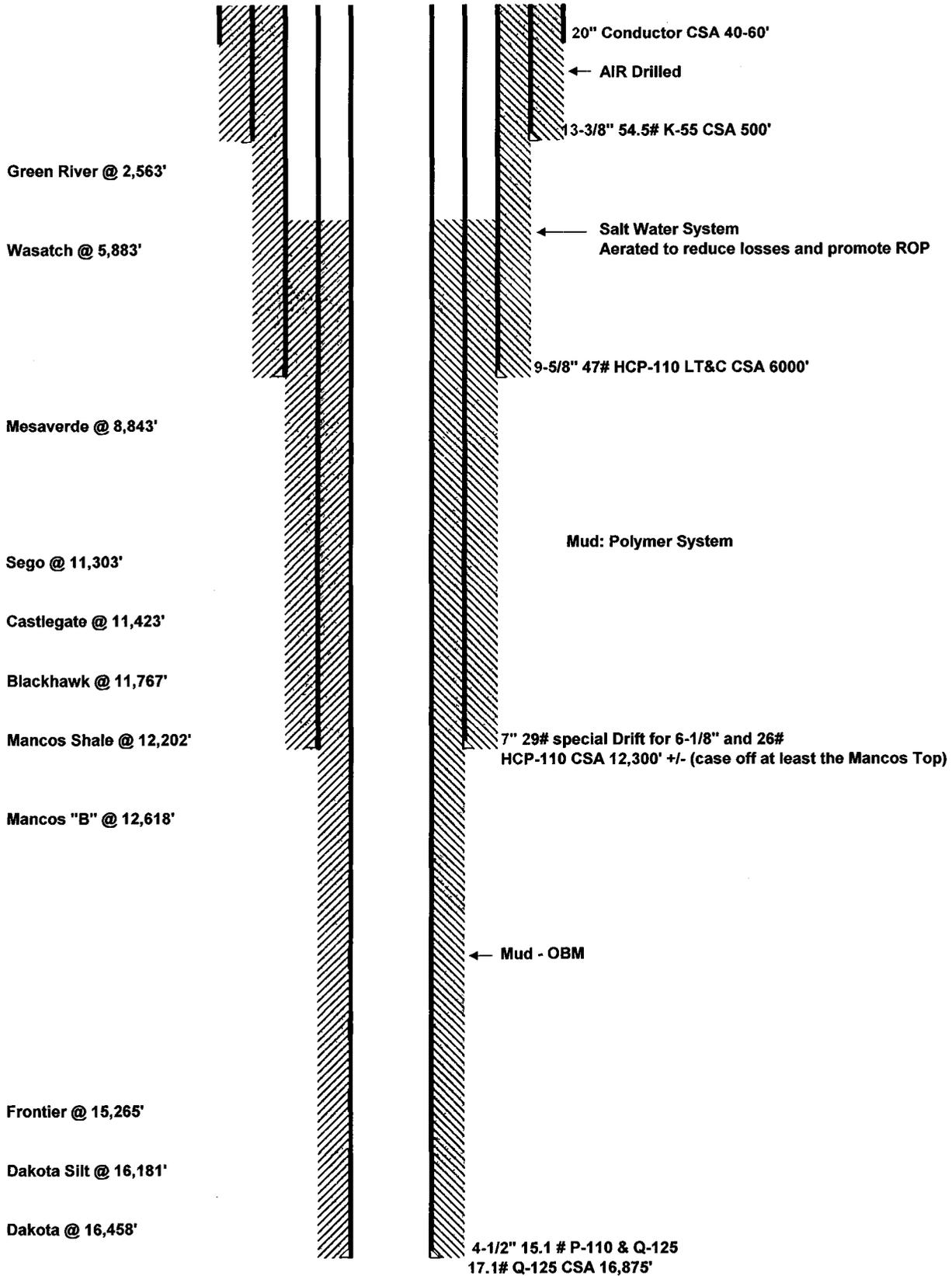
Miscellaneous

- SBI Equipment Cleaning.
- One Laboratory Analysis of Processed Material. (for parameters indicated herein)
- SBI Waste Treatment and Disposal Report.

CLIENT RESPONSIBILITY

- Client will provide SBI with a written work order or other Client recognized document to contract SBI to perform the work as described herein.
- Client will provide SBI with a list of any Client requirements related to performing and being compensated for the work described herein.
- Client will provide "all weather" ingress and egress to the site.
- Client will provide process add-mix water.
- Client agrees that delays or interruptions in SBI's work described herein caused by "Acts of Nature" or events under the responsibility of the Client or Client contractors (excluding SBI and it's contractors) may result in additional charges to Client.

WV 7BD-23-8-21



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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0809
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: UTE INDIAN TRIBE
		7. UNIT or CA AGREEMENT NAME: WONSITS VALLEY UNIT
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____	8. WELL NAME and NUMBER: WW 7BD-23-8-21	
2. NAME OF OPERATOR: QUESTAR EXPLORATION & PRODUCTION CO.		9. API NUMBER: 4304739044
3. ADDRESS OF OPERATOR: 11002 E. 17500 S. CITY VERNAL STATE UT ZIP 84078		10. FIELD AND POOL, OR WILDCAT: WONSITS VALLEY
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1418' FNL 2559' FEL		COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNE 23 8S 21E		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: _____	<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: APD EXTENSION
	<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.

Please be advised that the state APD for the above captioned well will expire on February 8, 2008. Questar Exploration and Production Company respectfully requests a one year extension.

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

Date: 02-19-08
By: [Signature]

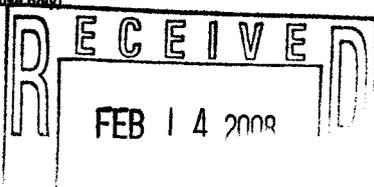
COPY SENT TO OPERATOR

Date: 2-21-2008

Initials: KS

NAME (PLEASE PRINT) <u>Laura Bills</u>	TITLE <u>Regulatory Affairs</u>
SIGNATURE <u>[Signature]</u>	DATE <u>2/4/2008</u>

(This space for State use only)



CONFIDENTIAL

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

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

API: 43-047-39044
Well Name: WV 7BD-23-8-21
Location: 1418' FNL 2559' FEL, SWNE, SEC. 23, T8S, R21E
Company Permit Issued to: Questar Exploration & Production Co.
Date Original Permit Issued: 2/8/2007

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

Maura Bills
Signature

2/4/2008
Date

Title: Regulatory Affairs

Representing: Questar Exploration & Production Co.

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: QUESTAR EXPLORATION & PRODUCTION COMPANY

Well Name: WV 7BD-23-8-21

Api No: 43-047-39044 Lease Type: FEDERAL

Section 23 Township 08S Range 21E County UINTAH

Drilling Contractor PETE MARTIN DRLG RIG # RATHOLE

SPUDDED:

Date 04/12/08

Time _____

How DRY

Drilling will Commence: _____

Reported by JD

Telephone # (307) 679-0071

Date 04/15/08 Signed CHD

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-0809

6. If Indian, Allottee or Tribe Name

UTE INDIAN TRIBE

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

WONSITS VALLEY UNIT

WONSITS VALLEY UNIT

WV 7BD-23-8-21

9. API Well No.

43-047-39044

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.

3a. Address

11002 East 17500 South, Vernal, UT 84078

3b. Phone No. (include area code)

435-781-4331

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

1418' FNL 2559' FEL, SWNE, SECTION 23, 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 Intermediate & TD Change
	<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 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.)

Due to the Updated Geological information from recent offset wells Questar Exploration & Production Company requests Permission to change the Intermediate casing depth for the 9-5/8" from the approved 6,000' to 4,500' as well as the 7" casing depth from the approved 12,300' to 12,155'. Which will change the TD from the approved 16,875' to 16,575'.

Please see attached:

- 1) Revised 8-point Drilling Program including revised BOP and Choke Manifold
- 2) Revised NewPark Drilling Fluids Program
- 3) Revised Halliburton Cement Recommendation

COPY SENT TO OPERATOR

Date: 4-16-2008

Initials: KS

**Federal Approval of this
Action is Necessary**

RECEIVED
APR 15 2008
DIV. OF OIL, GAS & MINING

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

Name (Printed/Typed)

Laura Bills

Signature

Laura Bills

Title

Associate Regulatory Affairs Analyst

Date

April 14, 2008

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

[Signature]

Title

**BRADLEY G. HILL
ENVIRONMENTAL MANAGER**

Date

04-15-08

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.

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	2,565'
Wasatch	5,885'
Mesaverde	8,845'
Sego	11,305'
Castlegate	11,425'
Blackhawk	11,770'
Mancos Shale	12,205'
Mancos B	12,620'
Frontier	15,275'
Dakota Silt	16,175'
Dakota	16,375'
TD	16,575'

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	5,885'
Gas	Mesaverde	8,845'
Gas	Blackhawk	11,770'
Gas	Mancos Shale	12,205'
Gas	Mancos B	12,620'
Gas	Dakota	16,375'

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" 5M psi BOP (schematic included) after setting 13 3/8" casing 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) after setting 9-5/8" casing 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.

DRILLING PROGRAM

4. **Casing Design:**

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	4,500'	47.0	HCP-110	Flush Jt **	New
8-1/2"	7"	sfc'	9,000'	26	HCP-110	LTC	New
8-1/2"	7"	9,000'	12,155'	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'	16,575'	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"	47.0 lb.	HCP-110	LTC	7,100 psi	9,440 psi	1,213,000 lb.
7"	26 lb.	HCP-110	LTC	7,800 psi	9,950 psi	693,000 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 Joint – VAM SLIJ II or LT&C based on availability

DRILLING PROGRAM

MINIMUM DESIGN FACTORS:

COLLAPSE: 1.125 (1.30 for 4 ½" casing***)
BURST: 1.10
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 will be drilled with air, mist, or mud depending on hole conditions. Drilling the 1st & 2nd intermediate holes below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. The 1st intermediate will utilize KCL in the water. No chromates will be used. It is intended to use oil base mud in the production hole. Max anticipated mud weight is 15.4 ppg. This density is required more for hole stability & not necessarily pore pressure. See attached mud program.

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 – 500' to TD
GR-SP-Induction, Neutron Density (Triple Combo or equivalent)
- D. Formation and Completion Interval: Final determination of completion interval(s) 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% CaCl₂.
Weight: 15.6 ppg, slurry yield: 1.20 ft³/sx, slurry volume: 17-1/2" hole + 100% excess.

9-5/8" Intermediate Casing: sfc – 4,500' (MD)

See attached cementing program:

7" Intermediate Casing: sfc - 12,155' (MD)

See attached cementing program:

4-1/2" Production Casing: sfc – 16,575' (MD)

See attached cementing program:

Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface on the intermediate strings and to 5,000' 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.

DRILLING PROGRAM

8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No H₂S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 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.

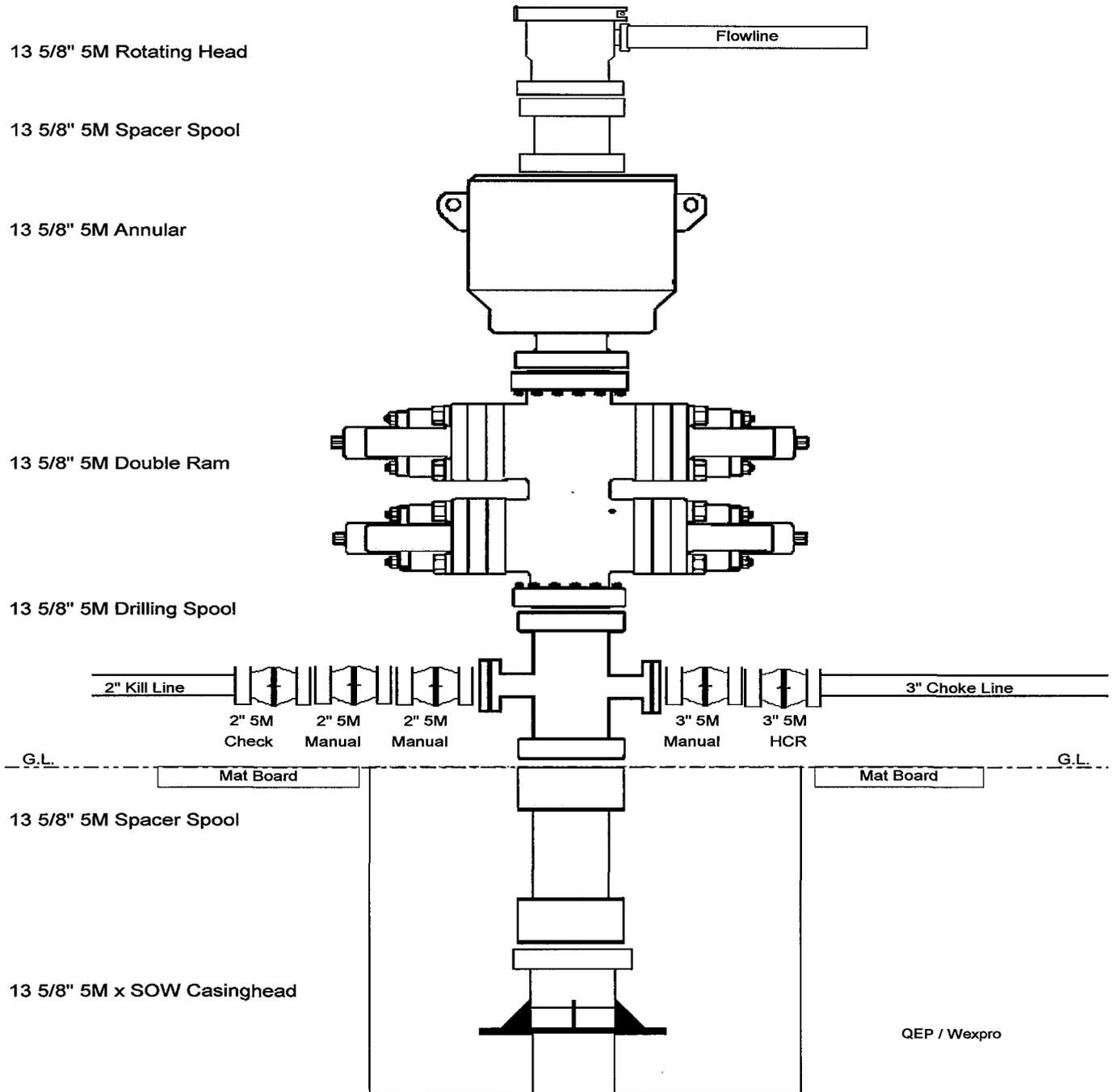
ADDITIONAL INFORMATION FOR OIL BASE MUD:

- A. See attached diagram of well pad layout. A reserve pit will be constructed for this location. This pit will be constructed so that a minimum of two vertical feet of freeboard exists above the top of the pit at all times and at least one-half of the holding capacity will be below ground level. The pit will be lined with a synthetic reinforced liner, 30 millimeters thick, with sufficient bedding used to cover any rocks prior to putting any fluids into the pit. The pad will be designed so that runoff from adjacent slopes does not flow into the reserve pit. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. At the beginning of drilling operations this reserve pit will have an open-ended dike placed in the pit that allows the fluids to migrate from one side of the pit to the other during the drilling of the surface and intermediate hole using water based mud. At the time that operations begin to drill the production hole with oil base mud, this dike will be extended, dividing the pit into two distinct, isolated halves allowing no migration of fluids from one side to the other. At that time all fluids will be removed from the end of the pit to be used as a cuttings pit. This cuttings pit will be used for oil based cuttings generated during drilling of the production hole.

DRILLING PROGRAM

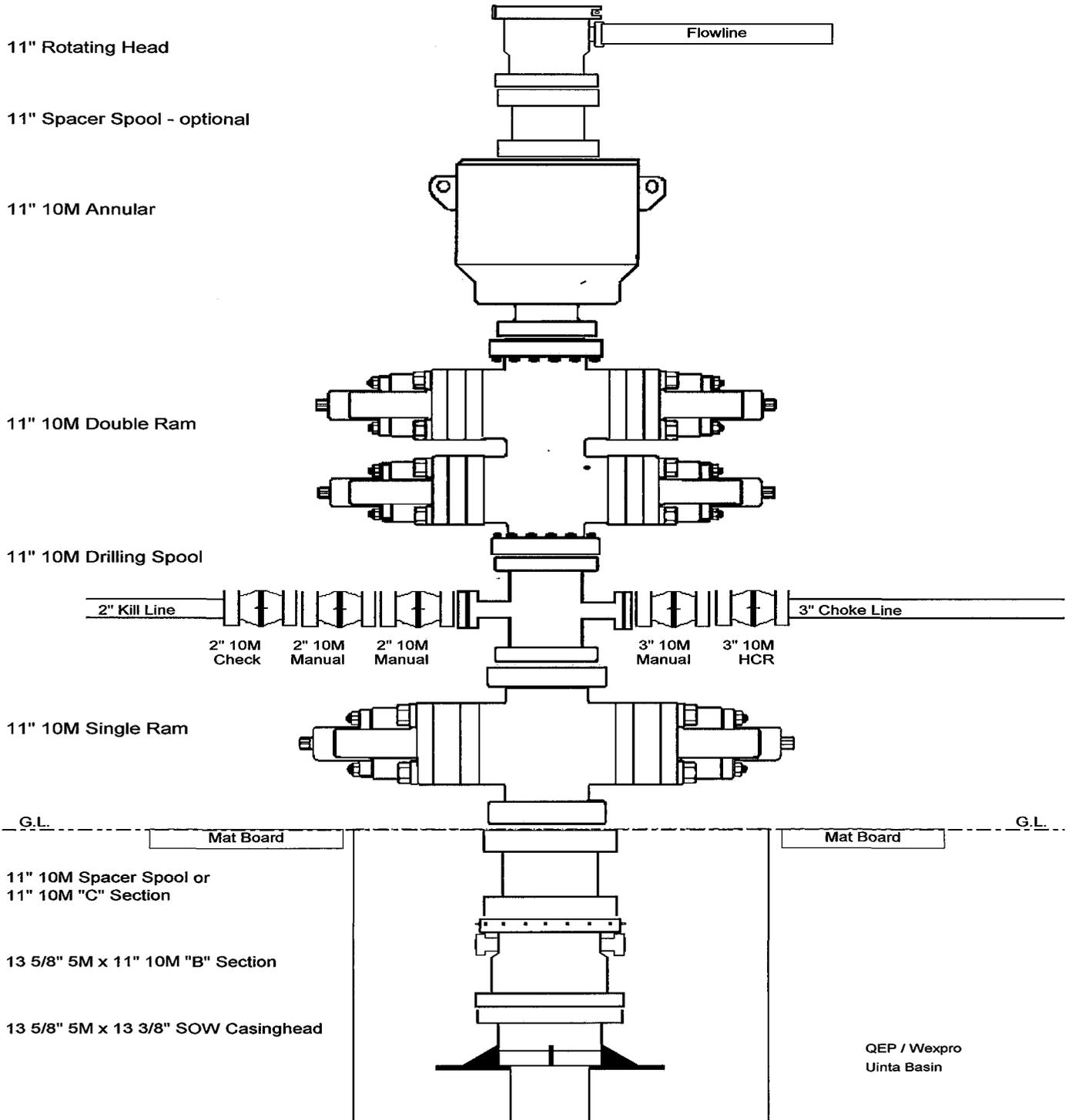
- B.** Oil-base mud will be mixed in the closed circulating system and transferred to four 500-bbl tanks on location for storage prior to and after drilling operations. Drip pans will be installed below the rotary beams on the substructure and can be viewed on site from the cellar area. As the production section of the hole is drilled, the cuttings transported to the surface with the drilling fluid will be mechanically separated from the drilling fluid as waste by two shale-shakers and then cleaned/dried via a mud cleaner and/or centrifuge. These separated cuttings will be collected in a steel catch tank once they leave the closed circulating system and transported and placed into the cuttings half of the reserve pit.
- C.** Plastic material will underlay the rig, oil base mud/diesel storage tanks and mud pits. All tanks on location will be placed inside of berms. Any oily waste fluids and sediments generated at the work site during drilling operations or when cleaning the fluid containment system after drilling will also be placed into the cuttings half of the pit.
- D.** All rig ditches will be lined and directed to a lined sump for fluid recovery. A drip pan will be installed on the BOP stack, a mud bucket will be utilized as needed on connections and a vacuum system will be used on the rig floor for fluid recovery in those areas.
- E.** Once all waste has been placed in the cuttings portion of the pit and all necessary approvals obtained, the oilfield waste management consultant Soli-Bond or a similar company will mobilize equipment and personnel to the site to perform the cement based solidification/stabilization process in-situ for encapsulation. Soil will be backfilled over the processed material used on the cuttings side of the pit and that portion of the pit area will be returned to the existing grade bordering the pit. Please see the attached Soli-Bond Proposal for Processing and Disposal of Drilling Waste for specific details. The half of the reserve pit containing water base materials will be left to evaporate and will be closed and reclaimed at the time that portion of the pit is dry.

DRILLING PROGRAM



QUESTAR / WEXPRO
5M BOPE
Minimum Requirements

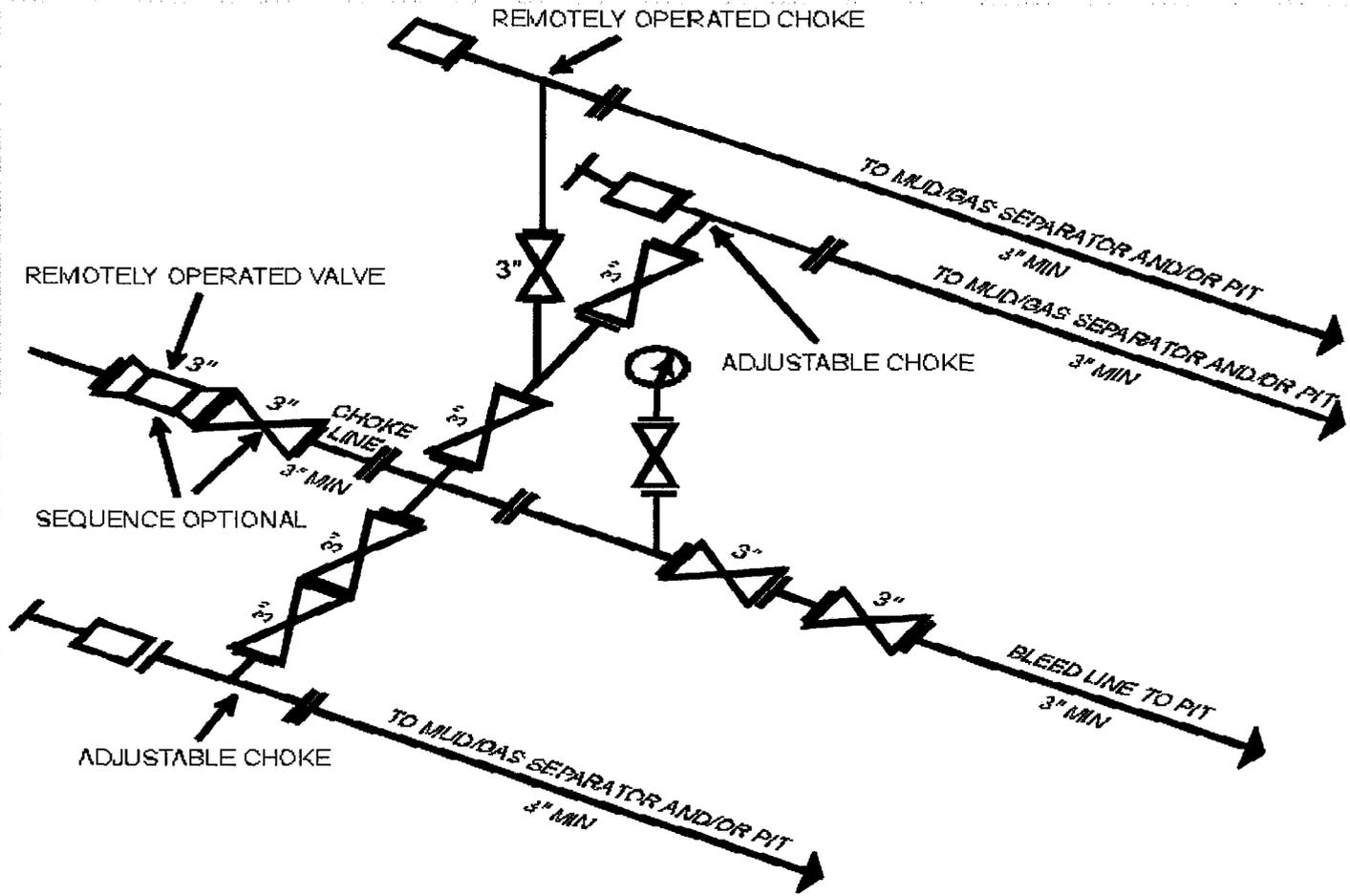
DRILLING PROGRAM



QUESTAR / WEXPRO
 10M BOP x 10M Annular for Deep Uinta Basin
 Minimum Requirements

DRILLING PROGRAM

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

QUESTAR / WEXPRO
TYPICAL 10M CHOKE MANIFOLD



NEWPARK

DRILLING FLUIDS, LLC

**Questar
Exploration &
Production Company**

WV 7BD-23-8-21

***Sec 23-T8S-R21E
Uintah County, Utah***

Drilling Fluids Program

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



Newpark Drilling Fluids, LP

410 17th Street, Suite 460

■ Denver, Colorado 80202

■ (303) 623-2205

■ FAX (720) 904-7970

April 1, 2008

Mr. John Owen
Questar Exploration & Production
1331 17th Street, Suite 800
Denver, Colorado 80202

RE: WV 7BD-23-8-21
Sec 23-T8S-R21E
Uintah Co, Utah

Mr. Owen:

Newpark Drilling Fluids, LP is pleased to present the enclosed revised recommended drilling fluids program for the WV 7BD-23-8-21 well to be drilled in Uintah County, Utah. This program is for drilling with KCL Water/FlexFirm in the 1st intermediate to 4500 ft, a polymer fluid system in the 2nd intermediate interval to 12,155 ft, then to T.D. at 16,880 ft with OBM.

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

For the 1st intermediate Interval, a KCL/Flex Firm 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 4,500' is expected to be in the 8.8-9.0 ppg range.

In the 2nd intermediate interval, drill out with the KCL water from the previous interval. A mud-up will be needed before the Trona Water at 5100'. 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 12,155 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 and Myton, UT facilities 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 7BD-23-8-21
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
2,563' 4,500'	Green River Mahogeny Intermediate T.D.	KCL/FlexFirm Hole size: 12-1/4" / Casing: 9 5/8" Drill out with KCL water. Maintain K silicate with 1-3 sks per 100 ft. Pump pre-hydrated NewGel or Flowzan /New Gel sweeps 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, convert the system to a KCL/Polymer system. 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 ²): NA FL (ml/30 min): NC LGS %: < 1% pH: 10.5-10.8 Cl (mg/l): 150-200K
5,883' 8,843' 11,303' 11,423' 11,767' 12,155'+/-	Wasatch Mesa Verde Sego Bucktongue Castlegate Blackhawk 2nd Intermediate T.D.	NewPHPA/Polymer 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 ²) : 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
12,202' 12,618' 15,265' 16,181' 16,458' 16,880'	Mancos Shale Mancos B Frontier equiv. Dakota Silt Dakota Total Depth	OptiDrill OBM 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 ²): 8-10 HPHT (mins/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 7BD-23-8-21
 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 ²)	API Fluid Loss (ml/30min)	Total Solids (%)
17-1/2"	0-500'	NA	NA	NA	NA	NA

1st Intermediate Hole: KCL/FlexFirm

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	API Fluid Loss (ml/30min)	Chloride Mg/l (x1000)	LGS Solids (%)
12-1/4"	500'-4,500'	8.8-9.0	NA	NA	NA	15-20	< 1%

2nd Intermediate Interval: NewPHPA/Polymer

Hole Size (in)	MD (ft)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	API Fluid Loss (ml/30min)	pH	LGS Solids (%)
8-1/2"	4,500'-10,000'	9.0-9.5	6-12	6-10	8-10	10.0-11.0	< 1%
8-1/2"	10,000'-12,155'	10.8-11.4	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 ²)	O/W Ratio (%)	HPHT Fluid Loss (ml/30min)	CaCl (mg/l) X 10,000	Electrical Stability (mv)	LGS Solids (%)
6-1/8"	12,155'-16,880'	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

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1st Intermediate Interval

12-1/4" Hole (500' - 4,500')

Questar
 Exploration & Production
 WV 7BD-23-8-21
 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 ²)	pH	API Fluid Loss (ml/30min)	KCL (%)	Low Gravity Solids	Chlorides Mg/l (x1000)
500'-4,500'+/-	8.8-9.0	NA	NA	NA	8.0-10.0	NA	3.0	<1.0	15-20

- Drill out with KCL water maintaining KCL % at 3.0.
- Mix FlexFirm at 3 sks per 100 ft drilled for hole stability and reduced bit balling.
- If a water flow is encountered, treat as needed for carbonates.
- 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, convert the KCL water to a KCL/Polymer system.
- 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.

Challenges:	Strategies:
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

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 Denver, CO. 80202
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1st Intermediate Interval

12-1/4" Hole (500' - 4,500')

Questar
Exploration & Production
WV 7BD-23-8-21
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 6,000' (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 (4,500'-12,155')

Questar
Exploration & Production
WV 7BD-23-8-21
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 ²)	pH	API Fluid Loss (ml/30min)	Hardness (Mg/l)	Low Gravity Solids
4,500'-10,000'	9.0-9.5	32-36	6-12	6-10	10.0-11.0	8-10	100+	4-6
10,000'-12,155'	10.5-11.4	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.

<i>Challenges:</i>	<i>Strategies:</i>
Hole Instability/Sloughing Shale	Consider 4-6 ppb Asphalt
Increase in Formation pressure	Monitor well conditions and increase density as needed with NewBar 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 DynaFiber and 10-20 ppb NewCarb as needed. For partial or total losses pump sweeps with 10-15 ppb FiberSeal and Cedar Fiber . 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 DynaPlug 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)



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2nd Intermediate Interval

8-1/2" Hole (4,500'-12,155')

Questar
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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 12,155'.

- 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
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(303) 623-2205 FAX (720) 904-7970

Production Interval

6-1/8" Hole (12,155'-16,880')

Questar
Exploration & Production
WV 7BD-23-8-21
Sec 23-T8S-R21E
Utah, County Utah

Production Interval Drilling Fluid Properties									
Depth Interval (TVD)	Mud Weight (ppg)	Plastic Viscosity (cp)	Yield Point (lb/100ft ²)	O/W Ratio %	HTHP Fluid Loss (ml/30min)	Excess Lime (PPB)	Electrical Stability (MV)	Low Gravity Solids	CaCl Mg/l Water
12,155'-16,880'	15.0-15.5	25-35	8-10	85:15	12-15	2-4	500+	< 6	300K

Drilling Fluid Recommendations: (12,155'-16,880')

- Displace to a OptiDrill OBM after finishing the casing job at 12,300'.
- 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"> • Have 1200-1300 bbls of OBM volume on location along with a pump capable of keeping up with displacement rates. • Pump a 10-20 bbl viscosified OBM spacer ahead of the OptiDrill (enough for 500 ft + separation) • A steady pump rate for either turbulent or plug flow should be used. Reciprocate and rotate to assist in minimizing channeling. • Do not shut down once displacement commences. • Should any contamination occur, isolate the contaminated fluid for reconditioning.
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"> • Spot weighted pills calculated to give a bottom hole pressure equal to drilling ECD. • Do not exceed drilling bottom hole pressure with the ECD pill. Lost circulation has been a problem on offset wells. • Stage weighted pills out of the hole and recover for future use.



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Production Interval

6-1/8" Hole (12,155'-16,880')

Questar
Exploration & Production
WV 7BD-23-8-21
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
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(303) 623-2205 FAX (720) 904-7970

Production Interval
6-1/8" Hole (12,300'-16,875')

Questar
Exploration & Production
WV 7BD-23-8-21
Sec 23-T8S-R21E
Uintah, County Utah

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

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



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Q E P E-bill

**1050 17th Street, Ste 500-do Not Ma
Denver, Colorado 80265**

WV 7BD-23-8-21
Red Wash Field
Uintah County, Utah
United States of America

Multiple String Cement Recommendation

Prepared for: Mr. John Owen
April 8, 2008
Version: 160516-1

Submitted by:
Aaron James
Halliburton
1125 17th St Suite 1900
Denver, Colorado 80202
303-899-4717

HALLIBURTON

Job Information

9 5/8" Intermediate Casing

WV 7BD-23-8-21

13 3/8" Surface Casing	0 - 500 ft (MD)
Outer Diameter	13.375 in
Inner Diameter	12.615 in
Linear Weight	54.50 lbm/ft
Casing Grade	K-55

12-1/4" Intermediate Open Hole	500 - 4500 ft (MD)
Inner Diameter	12.250 in
Job Excess	40 %

9 5/8" Intermediate Casing	0 - 4500 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.681 in
Linear Weight	47 lbm/ft
Casing Grade	HCP110

Mud Type	KCl/Polymer
Mud Weight	9.50 lbm/gal
BHCT	95 degF

Fluid Instructions

Fluid 1: Water Based Spacer
Gel Water Ahead

Fluid Density: 8.40 lbm/gal
Fluid Volume: 20 bbl

Fluid 2: Reactive Spacer
Super Flush

Fluid Density: 9.20 lbm/gal
Fluid Volume: 20 bbl

Fluid 3: Water Spacer
Fresh Water Behind

Fluid Density: 8.34 lbm/gal
Fluid Volume: 10 bbl

Fluid 4: Foamed Lead Cement
50/50 Poz Premium

0.1 % HALAD-766 (Low Fluid Loss Control)
5 lbm/sk Silicalite Compacted (Light Weight Additive)
20 % SSA-1 (Heavy Weight Additive)
0.1 % Versaset (Thixotropic Additive)
1.5 % FDP-C760-04 (Foamer)

Fluid Weight 14.30 lbm/gal
Slurry Yield: 1.47 ft³/sk
Total Mixing Fluid: 6.40 Gal/sk
Top of Fluid: 0 ft
Calculated Fill: 3000 ft
Volume: 227.53 bbl
Calculated Sacks: 563.51 sks
Proposed Sacks: 565 sks

Fluid 5: Foamed Tail Cement
50/50 Poz Premium

0.1 % HALAD-766 (Low Fluid Loss Control)
5 lbm/sk Silicalite Compacted (Light Weight Additive)
20 % SSA-1 (Heavy Weight Additive)
0.1 % Versaset (Thixotropic Additive)
1.5 % FDP-C760-04 (Foamer)

Fluid Weight 14.30 lbm/gal
Slurry Yield: 1.47 ft³/sk
Total Mixing Fluid: 6.40 Gal/sk
Top of Fluid: 3000 ft
Calculated Fill: 1000 ft
Volume: 78.09 bbl
Calculated Sacks: 222.84 sks
Proposed Sacks: 225 sks

Fluid 6: Tail Cement
50/50 Poz Premium

0.1 % HALAD-766 (Low Fluid Loss Control)
5 lbm/sk Silicalite Compacted (Light Weight Additive)
20 % SSA-1 (Heavy Weight Additive)
0.1 % Versaset (Thixotropic Additive)
1.5 % FDP-C760-04 (Foamer)

Fluid Weight 14.30 lbm/gal
Slurry Yield: 1.47 ft³/sk
Total Mixing Fluid: 6.40 Gal/sk
Top of Fluid: 4000 ft
Calculated Fill: 500 ft
Volume: 42.12 bbl
Calculated Sacks: 160.99 sks
Proposed Sacks: 165 sks

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Fluid 7: Water Spacer
Displacement

Fluid Density: 8.34 lbm/gal
Fluid Volume: 326.35 bbl

Fluid 8: Top Out Cement
Premium Cement
94 lbm/sk Premium Cement (Cement)
12 % Cal-Seal 60 (Accelerator)
3 % Calcium Chloride (Accelerator)

Fluid Weight 14.60 lbm/gal
Slurry Yield: 1.55 ft³/sk
Total Mixing Fluid: 7.35 Gal/sk
Proposed Sacks: 200 sks

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Gel Water Ahead	8.4	5.0	20 bbl
2	Spacer	Super Flush	9.2	5.0	20 bbl
3	Spacer	Fresh Water Behind	8.3	5.0	10 bbl
4	Cement	Foamed Lead	14.3	5.0	565 sks
5	Cement	Foamed Tail	14.3	5.0	225 sks
6	Cement	Unfoamed Tail	14.3	5.0	165 sks
7	Spacer	Displacement	8.3	7.0	326.35 bbl
8	Cement	12/3/ Thixo	14.6	1.5	200 sks

Foam Output Parameter Summary:

Fluid #	Fluid Name	Unfoamed Liquid Volume	Beginning Density lbm/gal	Ending Density lbm/gal	Beginning Rate scf/bbl	Ending Rate scf/bbl
Stage 1						
4	Foamed Lead	147.44bb l	9.5	9.5	51.0	361.3
5	Foamed Tail	58.30bbl	11.0	11.0	211.4	283.1

Foam Design Specifications:

Foam Calculation Method: Constant Density
 Backpressure: 250 psig
 Bottom Hole Circulating Temp: 95 degF
 Mud Outlet Temperature: 80 degF

Calculated Gas = 44753.0 scf
 Additional Gas = 40000 scf
 Total Gas = 84753.0 scf

HALLIBURTON

Job Information

7" Intermediate Casing

WV 7BD-23-8-21

9 5/8" Intermediate Casing	0 - 4500 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.681 in
Linear Weight	47 lbm/ft
Casing Grade	HCP110

8 1/2" Intermediate Open Hole	4500 - 12255 ft (MD)
Inner Diameter	8.500 in
Job Excess	25 %

7" Intermediate Casing	0 - 12255 ft (MD)
Outer Diameter	7.000 in
Inner Diameter	6.184 in
Linear Weight	29 lbm/ft
Casing Grade	HCP110

Mud Type	Polymer
Mud Weight	10.50 lbm/gal
BHCT	150 degF

HALLIBURTON

Job Recommendation

7" Intermediate Casing

Fluid Instructions

Fluid 1: Water Based Spacer
Gel Water Ahead

Fluid Density: 8.40 lbm/gal
Fluid Volume: 20 bbl

Fluid 2: Reactive Spacer
Super Flush

Fluid Density: 9.20 lbm/gal
Fluid Volume: 20 bbl

Fluid 3: Water Spacer
Fresh Water Behind

Fluid Density: 8.34 lbm/gal
Fluid Volume: 10 bbl

Fluid 4: Foamed Lead Cement
50/50 Poz Premium

0.1 % HALAD-766 (Low Fluid Loss Control)
5 lbm/sk Silicalite Compacted (Light Weight Additive)
20 % SSA-1 (Heavy Weight Additive)
0.1 % Versaset (Thixotropic Additive)
1.5 % FDP-C760-04 (Foamer)

Fluid Weight 14.30 lbm/gal
Slurry Yield: 1.47 ft³/sk
Total Mixing Fluid: 6.40 Gal/sk
Top of Fluid: 0 ft
Calculated Fill: 11755 ft
Volume: 320.05 bbl
Calculated Sacks: 896.59 sks
Proposed Sacks: 900 sks

Fluid 5: Tail Cement

50/50 Poz Premium

0.1 % HALAD-766 (Low Fluid Loss Control)
5 lbm/sk Silicalite Compacted (Light Weight Additive)
20 % SSA-1 (Heavy Weight Additive)
0.1 % Versaset (Thixotropic Additive)
1.5 % FDP-C760-04 (Foamer)

Fluid Weight 14.30 lbm/gal
Slurry Yield: 1.47 ft³/sk
Total Mixing Fluid: 6.40 Gal/sk
Top of Fluid: 11755 ft
Calculated Fill: 500 ft
Volume: 14.12 bbl
Calculated Sacks: 53.95 sks
Proposed Sacks: 55 sks

Fluid 6: Water Based Spacer
Mud Displacement

Fluid Density: 13 lbm/gal
Fluid Volume: 455.26 bbl

Fluid 7: Top Out Cement

Premium Cement

94 lbm/sk Premium Cement (Cement)
12 % Cal-Seal 60 (Accelerator)
3 % Calcium Chloride (Accelerator)

Fluid Weight 14.60 lbm/gal
Slurry Yield: 1.55 ft³/sk
Total Mixing Fluid: 7.35 Gal/sk
Proposed Sacks: 200 sks

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Job Procedure

7" Intermediate Casing

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Gel Water Ahead	8.4		20 bbl
2	Spacer	Super Flush	9.2		20 bbl
3	Spacer	Fresh Water Behind	8.3		10 bbl
4	Cement	50/50 Poz Premium - Foamed	14.3		900 sks
5	Cement	50/50 Poz Premium - Unfoamed	14.3		55 sks
6	Spacer	Mud Displacement	13.0		455.26 bbl
7	Cement	Cap Cement	14.6		200 sks

Foam Output Parameter Summary:

Fluid #	Fluid Name	Unfoamed Liquid Volume	Beginning Density lbm/gal	Ending Density lbm/gal	Beginning Rate scf/bbl	Ending Rate scf/bbl
Stage 1						
4	50/50 Poz Premium - Foamed	234.58bb 1	11.0	11.0	27.5	755.1

Foam Design Specifications:

Foam Calculation Method: Constant Density
Backpressure: 250 psig
Bottom Hole Circulating Temp: 150 degF
Mud Outlet Temperature: 130 degF

Calculated Gas = 94689.1 scf
Additional Gas = 40000 scf
Total Gas = 134689.1 scf

HALLIBURTON

Job Information

4 1/2" Production Casing

WV 7BD-23-8-21

9 5/8" Intermediate Casing	0 - 4500 ft (MD)
Outer Diameter	9.625 in
Inner Diameter	8.681 in
Linear Weight	47 lbm/ft
Casing Grade	HCP110
7" Intermediate Casing	0 - 12255 ft (MD)
Outer Diameter	7.000 in
Inner Diameter	6.184 in
Linear Weight	29 lbm/ft
Casing Grade	HCP110
6 1/8" Open Hole	12255 - 16575 ft (MD)
Inner Diameter	6.125 in
Job Excess	35 %
4 1/2" Production Casing	0 - 16575 ft (MD)
Outer Diameter	4.500 in
Inner Diameter	3.826 in
Linear Weight	15.10 lbm/ft
Casing Grade	P-110
Mud Type	Oil Based
Mud Weight	15 lbm/gal

Fluid Instructions

Fluid 1: Reactive Spacer

Tuned Spacer

0.5 gal/bbl Pen-5M (Surfactant)
379 lbm/bbl Barite (Heavy Weight Additive)
0.5 gal/bbl Musol(R) A (Additive Material)
0.5 gal/bbl SEM-7 (Additive Material)

Fluid Density: 15.50 lbm/gal
Fluid Volume: 30 bbl

Fluid 2: Primary Cement

Premium Cement

94 lbm/sk Premium Cement (Cement)
17.5 % SSA-1 (Cement Material)
0.5 % HR-601 (Cement Material)
0.2 % Halad(R)-344 (Low Fluid Loss Control)
0.5 % Halad(R)-413 (Low Fluid Loss Control)
0.3 % CFR-3 (Cement Material)
0.2 % HR-25 (Retarder)
0.2 % Super CBL (Expander)
0.2 % Suspend HT (Cement Material)
17.5 % Common White-100 Mesh, SSA-2 (Additive Material)
0.3 % D-AIR 3000 (Defoamer)

Fluid Weight 16.20 lbm/gal
Slurry Yield: 1.45 ft³/sk
Total Mixing Fluid: 5.64 Gal/sk
Top of Fluid: 5000 ft
Calculated Fill: 11575 ft
Volume: 225.21 bbl
Calculated Sacks: 870.26 sks
Proposed Sacks: 875 sks

Fluid 3: Water Spacer

Water Displacement

Fluid Density: 8.34 lbm/gal
Fluid Volume: 235.10 bbl

Detailed Pumping Schedule

Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Estimated Avg Rate bbl/min	Downhole Volume
1	Spacer	Tuned Spacer	15.5		30 bbl
2	Cement	Premium Cement	16.2		875 sks
3	Spacer	Water Displacement	8.3		235.10 bbl

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.
UTU-0809

6. If Indian, Allottee or Tribe Name
UTE TRIBE

7. If Unit or CA, Agreement Designation
WONSITS VALLEY UNIT

8. Well Name and No.
WV 7BD 23 8 21

9. API Well No.
43-047-39044

10. Field and Pool, or Exploratory Area
WONSITS VALLEY

11. County or Parish, State
UINTAH

SUBMIT IN TRIPLICATE

1. Type of Well
Oil Gas
Well Well Other

2. Name of Operator
QUESTAR EXPLORATION & PRODUCTION CO.

3. Address and Telephone No. **11002 EAST 17500 SOUTH - VERNAL, UT 84078**
Contact: **Dahn.Caldwell@questar.com**
435-781-4342 Fax 435-781-4357

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1418' FNL, 2559' FEL, SWNE, SEC 23-T8S-R21E

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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 checked="" 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>SPUD</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)

On 4/12/08 - Drilled 90' of 30" conductor hole. Set 90' of 20" conductor pipe. Cmtd w/ Ready Mix.

On 4/14/08 - Drilled 17-1/2" hole to 554'. Set 12 jts of 13-3/8", K-55, 54.5# csg. Cmtd w/ 500 sxs cmt.

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 Title Office Administrator II Date 4/15/08

(This space for Federal or State office use)

Approved by: _____ Title _____ Date _____

Conditions of approval, if any

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OPERATOR: **Questar Exploration & Production Co.**
ADDRESS: **11002 East 17500 South**
Vernal, Utah 84078 (435)781-4342

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
A	99999	16812	43-047-39044	WV 7BD 23 8 21	SWNE	23	8S	21	Uintah	4/12/2008	4/28/08
WELL 1 COMMENTS: DKTA											
CONFIDENTIAL											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

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 APR 17 2008

- 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)

John F. Caldwell
Signature

Office Administrator II 4/15/08
Title Date

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

Phone No. **(435)781-4342**

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43-047-39044
23 8s 21e

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QUESTAR

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Start: 4/12/2008
 Rig Release:
 Rig Number: 66

Spud Date: 4/12/2008
 End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
4/12/2008	06:00 - 18:00	12.00	DRL	1	DRLSUR	DRLG & SET 90' OF 20" CONDUCTOR & 85 MOUSEHOLE, BLM -STAE NOTIFIED OF SPUD ON 4/12/2008, DRLG TO 554' FT & SET 537' FT OF 13 3/8", 54.5 # K-55 SURFACE CASING
4/30/2008	06:00 - 18:00	12.00	LOC	4	RDMO	RIG DOWN ON THE NBE-4DD, RIG DOWN VFD HOUSE, 1 MOTOR, DOGHOUSES, DRAWWORKS, MUD TANKS., MOVE MUD PRODUCTS OFF LOC. MOVE AND SET RIG CAMPS ON NEW LOC. MOVE FUEL TANK AND PARTS HOUSE TO NEW LOC. 40% RIGGED DOWN 10% MOVED 10% RIGGED UP
5/1/2008	18:00 - 06:00	12.00	LOC	4	RDMO	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RDMO	RIG DOWN ON NBE 4DD & MOVE TO WV 7 BD, SUB BASES, MOTORS, PUMPS, SPLIT DERRICK, MUD TANKS, GAS BUSTER--MOVE 10 LOADS TO NEW LOCATION 95% RIGGED DOWN 35% MOVED 10% RIGGED UP
5/2/2008	18:00 - 06:00	12.00	LOC	4	RDMO	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RDMO	RIG DOWN ON NBE 4DD & MOVE TO WV 7BD, R/D BOPS, MATTING BOARDS - MOVE SUB BASES, PUMPS, DERICK, MATTING BOARDS, BOP'S, MOTORS 100% RIGGED DOWN 75% MOVED 10% RIGGED UP
5/3/2008	18:00 - 06:00	12.00	LOC	4	RDMO	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	MIRU	RIGGING UP, LAY PLASTIC, SET MATTING BOARDS, SUB BASES, SET BOP'S, PUMPS, MUD TANKS, PUT DERRICK TOGETHER, 10 LOADS LEFT ON OLD LOCATION 100% RIGGED DOWN 90% MOVED 45% RIGGED UP
5/4/2008	18:00 - 06:00	12.00	LOC	4	MIRU	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	MIRU	RIG UP, SET SUB BASE SPREADER BEAMS, ROTARY TABLE, DRILLERS DOG HOUSE, MOTORS, PER-MIX TANK, SET DERRICK ON FLOOR 100% RIGGED DOWN 100% MOVED 70% RIGGED UP
5/5/2008	18:00 -		LOC	4	MIRU	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	MIRU	RAISE A-LEGS, STRING UP BLOCKS, SET MUD CLEANING EQUIPMENT & BAR HOPPERS, KEEP ONE BED TRUCK FOR TOP DRIVE & CAT WALK--RELEASE REST OF TRUCKS & CRANE, DRAWWORKS HYDRULIC BRAKE LOCKED PLC IN VFD HOUSE WILL NOT LET IT RELEASE--TECH COMING TOMORROW TO CHECK OUT 100% RIGGED DOWN 100% MOVED 90% RIGGED UP
5/6/2008	18:00 - 06:00	12.00	LOC	4	MIRU	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	MIRU	RIG UP RIG & EQUIPMENT, RIG UP GAS BUSTER LINE, FLARE LINES, MUD LINES, PLUG IN ELETRIC LINES, CHANGE PUMP LINERS & SWABS
	18:00 - 06:00	12.00	LOC	4	MIRU	RIG UP, DERRICK INSPECTION, S/M, RAISE DERRICK--UP @ 20:00

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Operations Summary Report

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 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Start: 4/12/2008
 Rig Release:
 Rig Number: 66

Spud Date: 4/12/2008
 End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/6/2008	18:00 - 06:00	12.00	LOC	4	MIRU	HRS,BRIDLE DOWN,RIG UP FLOOR
5/7/2008	06:00 - 18:00	12.00	LOC	4	MIRU	IDM TECH COMMING TODAY TO CHECK OUT VFD HOUSE RIG UP FLOWLINE,P/U TOP DRIVE,SET PRAGMA CAT WALK,CEMENT CELLAR
	18:00 - 06:00	12.00	LOC	4	MIRU	IDM TECH TROUBLE SHOOTING PROBLEM IN VFD HOUSE FINISH RIG UP TOP DRIVE AND PRAGMA, HAMMER UP BOPE, MOUNT ROTARY HEAD AND SPOOL,
5/8/2008	06:00 - 11:00	5.00	BOP	1	DRLIN1	W/O/BUSS F/RECTIFIER F/VFD HOUSE, NIPPLE UP BOPE
	11:00 - 13:00	2.00	BOP	2	DRLIN1	TEST UPPER & LOWER VALVES ON TOP DRIVE,FLOOR VALVES
	13:00 - 16:00	3.00	WOT	4	DRLIN1	WAIT ON TEST PLUG
	16:00 - 18:00	2.00	WOT	4	DRLIN1	RIG DOWN TESTERS AND WAIT ON REPLACEMENT TESTER
	18:00 - 01:00	7.00	BOP	2	DRLIN1	FINISH TESTING BOPS,TEST BLIND,PIPES,FLOOR VALVES,UPPER & LOWER CONTROL VALVES ON TOP DRIVE,CHOKE MANIFOLD TO 5000 PSI FOR 10 MIN. AND 250 PSI FOR 5 MIN.ANNULAR TO 3500 PSI FOR HIGH AND 250 PSI FOR LOW,CASING TO 1500 PSI FOR 30 MIN.KOOMEY FUNCTION TEST,ALL EQUIPMENT TESTED GOOD.
	01:00 - 01:30	0.50	DEQ	4	DRLIN1	SET WEAR BUSHING
	01:30 - 06:00	4.50	RIG	2	DRLIN1	RIG REPAIR,WAIT ON BUSS FOR RECTIFIER
5/9/2008	06:00 - 01:30	19.50	RIG	2	DRLIN1	RIG REPAIR,WAIT ON BUSS FOR RECTIFIER
	01:30 - 02:00	0.50	RIG	7	DRLIN1	PRE SPUD INSPECTION & SAFETY MEETING
	02:00 - 06:00	4.00	TRP	1	DRLIN1	P/U 12 1/4 BHA
5/10/2008	06:00 - 08:00	2.00	TRP	1	DRLIN1	P/U 12 1/4 BHA
	08:00 - 11:00	3.00	DRL	4	DRLIN1	DRLG OUT FLOAT EQUIPMENT, POCKET & 10 FT NEW HOLE F/554 TO 564 FT
	11:00 - 12:00	1.00	EQT	2	DRLIN1	FIT TO EMW OF 10.5 PPG, 61 PSI, MUD WT 8.4
	12:00 - 16:00	4.00	DRL	1	DRLIN1	DRLG F/564 TO 845 FT.
	16:00 - 16:30	0.50	RIG	1	DRLIN1	RIG SERVICE
	16:30 - 19:00	2.50	DRL	1	DRLIN1	DRLG F/ 845' TO 972 FT.
	19:00 - 19:30	0.50	OTH		DRLIN1	LAY DOWN WASHED JT. SHWDP (BOX END)
	19:30 - 20:30	1.00	DRL	1	DRLIN1	DRLG F/ 972' TO 1030 FT. (WOB 8/10,RPM 45,SPM 100 X 100,PSI 2400)
	20:30 - 21:00	0.50	SUR	1	DRLIN1	WIRELINE SURVEY AT 945'
	21:00 - 21:30	0.50	RIG	2	DRLIN1	# 3 ENGINE WENT DOWN,BLACKED RIG OUT
	21:30 - 06:00	8.50	DRL	1	DRLIN1	DRLG F/ 1030' TO 1320 FT. (WOB 8/10,RPM 50,SPM 105X105,PSI 2675)
5/11/2008	06:00 - 07:00	1.00	DRL	1	DRLIN1	DRLG F/1320 TO 1374 (54 FT 54 FPH) WOB 8-12 RPM 138, GPM 880
	07:00 - 07:30	0.50	RIG	2	DRLIN1	RIG REPAIR TOP DRIVE ROTARY, LOOSE CABLE CONNECTION IN DERRICK
	07:30 - 11:00	3.50	DRL	1	DRLIN1	DRLG F/1374 TO 1550 (176 FT 50.28 FPH) WOB 8-20 RPM 158, GPM 880
	11:00 - 11:30	0.50	SUR	1	DRLIN1	SURVEY @1465 .7 DEG AZ 225.8 TVD 1464.95
	11:30 - 12:00	0.50	RIG	4	DRLIN1	INSTALL STRIPPING RUBBER
	12:00 - 15:00	3.00	RIG	2	DRLIN1	RIG REPAIR POWER LOSS & FIX LEAK IN STANDPIPE UNION
	15:00 - 22:00	7.00	DRL	1	DRLIN1	DRLG F/1550 TO 1920 FT. (370 FT. 52.8 FPH) WOB 8/18, RPM 149, SPM 105X85 AT 796 GPM
	22:00 - 23:00	1.00	RIG	2	DRLIN1	CHANGE OUT SWAB & LINER #1 PUMP
	23:00 - 01:30	2.50	DRL	1	DRLIN1	DRLG F/ 1920' TO 2091 FT. (171 FT. 68.4FPH) WOB 8/18,RPM 151,SPM 95X95 AT 796 GPM
	01:30 - 02:00	0.50	SUR	1	DRLIN1	WIRELINE SURVEY AT 2006 FT.
	02:00 - 06:00	4.00	DRL	1	DRLIN1	DRLG F/ 2091' TO 2300 FT. (209 FT. 52.25 FPH) WOB 8/18,RPM 150,SPM 90X90 AT 754 GPM

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 End:
 Rig Release:
 Group:
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/12/2008	06:00 - 14:30	8.50	DRL	1	DRLIN1	DRLG F/2300 TO 2567 (267 FT 31.41 FPH) WOB 12-25, RPM 115-150, GPM 754
	14:30 - 15:00	0.50	RIG	1	DRLIN1	RIG SERVICE
	15:00 - 16:30	1.50	DRL	1	DRLIN1	DRLG F/2567 TO 2581 (14 FT 9.33 FPH)
	16:30 - 17:00	0.50	CIRC	1	DRLIN1	CIR & MIX SLUG
	17:00 - 18:00	1.00	SUR	1	DRLIN1	DROP SURVEY, & PUMP DRY JOB
	18:00 - 19:30	1.50	TRP	10	DRLIN1	TOH TO SHOE
	19:30 - 22:00	2.50	RIG	2	DRLIN1	REPROGRAM #3 ENGINE AND GET ON LINE
	22:00 - 00:00	2.00	TRP	10	DRLIN1	FINISH TRIP OUT WITH BIT #1
	00:00 - 01:30	1.50	TRP	2	DRLIN1	TRIP TO CSG SHOE WITH BIT #2
	01:30 - 02:00	0.50	RIG	2	DRLIN1	FILL PIPE & LOAD TEST ENGINE'S
	02:00 - 03:30	1.50	TRP	2	DRLIN1	CONTINUE TRIP IN
	03:30 - 06:00	2.50	DRL	1	DRLIN1	DRLG. F/ 2581' TO 2663 FT (82 FT. 32.8 FPH) WOB 15,RPM 70,SPM 105X105, PSI 3100 AT 880 GPM
	5/13/2008	06:00 - 14:00	8.00	DRL	1	DRLIN1
14:00 - 14:30		0.50	RIG	1	DRLIN1	RIG SERVICE
14:30 - 06:00		15.50	DRL	1	DRLIN1	DRLG. 2758' TO 2912 FT. (154 FT @ 9.9 FPH) WOB 12-15,RPM 158,SPM 105X105,880 GPM
5/14/2008	06:00 - 06:30	0.50	DRL	1	DRLIN1	DRLG F/2912 TO 2924
	06:30 - 07:00	0.50	CIRC	1	DRLIN1	CIR & MIX TRIP SLUG
	07:00 - 07:30	0.50	SUR	1	DRLIN1	DROP SURVEY
	07:30 - 11:00	3.50	TRP	10	DRLIN1	TOH F/BIT #3
	11:00 - 13:00	2.00	TRP	1	DRLIN1	CHANGE OUT BITS & MOTORS
	13:00 - 16:00	3.00	TRP	2	DRLIN1	TIH TO 2886 FT.
	16:00 - 16:30	0.50	REAM	1	DRLIN1	WASH FROM 2886' TO 2924' (38 FT) TO BOTTOM
5/15/2008	16:30 - 06:00	13.50	DRL	1	DRLIN1	DRLG. F/ 2924' TO 3070 FT. (146' AT 10.8 FPH) WOB 15/20,RPM 162,SPM 105X105 AT 3125 PSI AT 880 GPM
	06:00 - 14:00	8.00	DRL	1	DRLIN1	DRLG. 3070' TO 3140 FT. (70' @ 8.75 FPH)WOB 12/17,RPM 167,SPM 110X110 AT 2950 PSI AT 922 GPM
	14:00 - 14:30	0.50	RIG	1	DRLIN1	RIG SERVICE
5/16/2008	14:30 - 06:00	15.50	DRL	1	DRLIN1	DRLG. 3140 FT. 3290 FT. @ 9.6 FPH) WOB 12/16,RPM 167,SPM 110X110 AT 3050 PSI AT 922 GPM
	06:00 - 09:30	3.50	DRL	1	DRLIN1	DRLG F/3290 TO 3331 (41 FT 11.71 FPH) WOB 14-20 GMP 921 RPM 167
	09:30 - 10:00	0.50	RIG	1	DRLIN1	RIG SERVICE
5/17/2008	10:00 - 13:30	3.50	DRL	1	DRLIN1	DRLG F/3331 TO 3382 (51 FT 14.57 FPH) WOB 14-20 GMP 921 RPM 167
	13:30 - 15:30	2.00	RIG	2	DRLIN1	RIG REPAIR MUD PUMPS, CHANGE OUT 2 VALVE SEATS
	15:30 - 18:30	3.00	DRL	1	DRLIN1	DRLG F/3382 TO 3425 (43 FT 14.33 FPH) WOB 14-20 GMP 921 RPM 167, HIGH TORQUE 4400 TO 10700
	18:30 - 19:00	0.50	CIRC	1	DRLIN1	CIR BTM'S UP
	19:00 - 19:30	0.50	SUR	1	DRLIN1	FLOW CHECK & DROP SURVEY
	19:30 - 22:00	2.50	TRP	2	DRLIN1	TOH
	22:00 - 00:30	2.50	TRP	1	DRLIN1	CHANGE OUT MUD MTRS & BITS,LAY DOWN IBS
	00:30 - 01:00	0.50	TRP	2	DRLIN1	TRIP IN TO CSG. SHOE
	01:00 - 01:30	0.50	OTH	1	DRLIN1	CHANGE SAVER SUB & CORR. RING.
	01:30 - 02:30	1.00	RIG	2	DRLIN1	CHANGE OUT LINK TILT CYLINDER
	02:30 - 04:30	2.00	TRP	2	DRLIN1	TIH
	04:30 - 05:00	0.50	REAM	1	DRLIN1	WASH & REAM 94 FT TO BTM
	05:00 - 06:00	1.00	DRL	1	DRLIN1	DRLG F/3425 TO 3455
06:00 - 07:00	1.00	DRL	1	DRLIN1	DRLG F/3455 TO 3515 (60 FT 60 FPH) WOB 12-15, RPM 166, GPM 880, 1/2 TRONA WATER FLOW	

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 Rig Release:
 Rig Number: 66

End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations	
5/17/2008	07:00 - 07:30	0.50	RIG	1	DRLIN1	RIG SERVICE	
	07:30 - 14:00	6.50	DRL	1	DRLIN1	DRLG F/3515 TO 3734 (219 FT 33.6 FPH) WOB 12-15, RPM 162, GPM 838, 1/2 TRONA WATER FLOW	
	14:00 - 14:30	0.50	RIG	2	DRLIN1	PUMP REPAIR, CHANGE SWAP #2 PUMP	
	14:30 - 23:30	9.00	DRL	1	DRLIN1	DRLG F/ 3734' TO 3994' (259 FT. @ 28.7 FPH) WOB 12-15,RPM 160, GPM 838,SPM 100X100 AT 3300 PSI	
	23:30 - 00:30	1.00	SUR	1	DRLIN1	CIRCULATE CLEAN HOLE & RUN WIRELINE SURVEY AT 3909 FT. HAD 11/2" WATER FLOW	
	00:30 - 04:00	3.50	DRL	1	DRLIN1	DRLG F/ 3994' TO 4089 (95 FT. @ 27.0 FPH) WOB 12-15,RPM 160,GPM 838,SPM 100X100 AT 3300 PSI	
	04:00 - 05:00	1.00	RIG	2	DRLIN1	CHANGE SWAB #2 PUMP,TIGHTEN CLAMP ON SAVER SUB	
	05:00 - 06:00	1.00	DRL	1	DRLIN1	DRLG 4089' TO 4119 FT (25 FT. @ 25 FPH) WOB 12-15,RPM 160,GPM 880,SPM 100X100 AT 3300 PSI	
	5/18/2008	06:00 - 12:00	6.00	DRL	1	DRLIN1	DRLG F/4119 TO 4293 (174 FT AT 29.0 FPH) WOB 12-15,RPM 160,SPM 100X100,838 GPM AT 3300 PSI, TRONA FLOW 1"
		12:00 - 12:30	0.50	RIG	1	DRLIN1	RIG SERVICE
12:30 - 19:00		6.50	DRL	1	DRLIN1	DRLG F/4293 TO 4533 (240 FT AT 36.92 FPH) WOB 14-18,RPM 160,SPM 100X100,838 GPM AT 3300 PSI, TRONA FLOW 1/4", RAISE MUD WT TO 9.2 PPG	
19:00 - 20:00		1.00	CIRC	1	DRLIN1	CIR LCM SWEEP	
20:00 - 22:00		2.00	TRP	14	DRLIN1	FLOW CHECK, SHORT TRIP 20 STD	
22:00 - 00:30		2.50	CIRC	1	DRLIN1	CIR 2 LCM SWEEPS, FLOW CHECK	
00:30 - 01:00		0.50	SUR	1	DRLIN1	FLOW CHECK - DROP SURVEY	
01:00 - 05:00		4.00	TRP	2	DRLIN1	TRIP OUT TO RUN 9 5/8" CASING, SLM 2.5 FT DIFFERENCE	
05:00 - 06:00		1.00	TRP	1	DRLIN1	L/D 12 1/4 BHA	
5/19/2008		06:00 - 07:30	1.50	OTH		CSGIN1	PULL WEAR BUSHING
	07:30 - 11:00	3.50	CSG	1	CSGIN1	R/U CASING CREW & SAFETY MEETING	
	11:00 - 14:00	3.00	WOT	4	CSGIN1	M/U FLOAT, CASING TONGS UNABLE TO TORQUE CONNECTION, W/O/HIGH TORQUE TONGS	
	14:00 - 17:00	3.00	CSG	2	CSGIN1	RUN 9 5/8 CASING TO 1699 FT	
	17:00 - 18:30	1.50	CSG	2	CSGIN1	REMOVE 2 BROKEN CENTRILIZER HUNG UP ON DRILLING NIPPLE	
	18:30 - 20:30	2.00	CSG	2	CSGIN1	RUN 9 5/8 CASING TO 2668 FT	
	20:30 - 21:00	0.50	CSG	2	CSGIN1	CHANGE OUT CASING TONGS	
	21:00 - 00:00	3.00	CSG	2	CSGIN1	FINISH RUNING CASING TO 4490 FT.	
	00:00 - 02:30	2.50	CIRC	1	CSGIN1	CIRC & CONDITION HOLE	
	02:30 - 03:30	1.00	CSG	2	CSGIN1	LAND CASING AT 4517.9 FT. WITH 220,000 STRING WT. AND TIGHTEN DOWN LOCK DOWN PINS	
5/20/2008	03:30 - 06:00	2.50	CMT	1	CSGIN1	S/M & RIG UP HALLIBURTON & L/D FILL TOOL	
	06:00 - 06:30	0.50	CMT	2	CSGIN1	HOLD SAFETY MTG WITH CEMENTERS AND INSTALL CMT.HEAD & LOAD PLUG	
	06:30 - 10:30	4.00	CMT	2	CSGIN1	CEMENT 9 5/8" HCP110 (SLIJ) BUMP PLUG-CHECK FLOATS HELD,GOT 175 BBL'S CMT TO SURFACE	
	10:30 - 11:00	0.50	EQT	1	CSGIN1	PRESSURE TEST CASING TO 1500 PSI AT 30 MIN.	
	11:00 - 11:30	0.50	CMT	1	CSGIN1	RIG DOWN HALLIBURTON	
	11:30 - 14:00	2.50	BOP	1	CSGIN1	NIPPLE DOWN BOP	
	14:00 - 16:00	2.00	BOP	1	CSGIN1	INSTALL BOP CRADLE AND P/U STACK	
	16:00 - 16:30	0.50	CSG	6	CSGIN1	CUT OFF CASING	
	16:30 - 18:00	1.50	BOP	1	CSGIN1	NIPPLE DOWN BOPE	
	18:00 - 23:00	5.00	WHD	1	CSGIN1	NIPPLE UP B SECTION & TEST TO 5000 PSI / 15 MIN.	
5/21/2008	23:00 - 06:00	7.00	BOP	1	CSGIN1	NIPPLE UP BOPE	
	06:00 - 11:00	5.00	BOP	1	DRLIN1	N/U 11" BOP'S & HYDRULIC LINES,FUNCTION TEST	
	11:00 - 17:00	6.00	BOP	2	DRLIN1	R/U B&C QUICK TEST,TEST UPPER & LOWER TOP DRIVE VALVES,ALL FLOOR VALVES, PIPE RAMS,BLIND RAMS,MANUEL	

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 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/21/2008	11:00 - 17:00	6.00	BOP	2	DRLIN1	CHOKES & KILL VALVES,HCR,CHOKES MANIFOLD TO 10000 PSI F/10 MIN & 250 PSI F/5 MIN,ANNULAR TO 5000 PSI F/10 MIN & 250 PSI F/5 MIN,MUD LINE TO 3500 PSI,KOOMEY FUNCTION TEST
	17:00 - 18:00	1.00	BOP	1	DRLIN1	N/U FLOWLINE
	18:00 - 18:30	0.50	BOP	1	DRLIN1	INSTALL WEAR BUSHING
	18:30 - 20:00	1.50	TRP	1	DRLIN1	STRAP & CALIPER BHA,P/U BHA
	20:00 - 23:00	3.00	TRP	2	DRLIN1	TIH HOLE TO 4396
	23:00 - 00:00	1.00	RIG	6	DRLIN1	SLIP & CUT 99' DRILLING LINE
	00:00 - 02:30	2.50	DRL	4	DRLIN1	DRLG CEMENT & FLOAT EQUIP,FC @ 4425-SHOE @ 4418
	02:30 - 03:00	0.50	DRL	1	DRLIN1	DRLG F/4533 TO 4543
	03:00 - 03:30	0.50	CIRC	1	DRLIN1	CIR BTMS UP
	03:30 - 04:00	0.50	EQT	2	DRLIN1	FIT TEST W/9.1 PPG MUD & 1039 PSI = 13.5 PPG EQUIV
	04:00 - 06:00	2.00	DRL	1	DRLIN1	DRLG F/4543 TO 4652 (109 FT @ 54.5 FPH) WOB 8/12,GPM 545,RPM 50
	5/22/2008	06:00 - 09:30	3.50	DRL	1	DRLIN2
09:30 - 10:30		1.00	SUR	1	DRLIN2	CIR BTM & SURVEY @ 4697,INC 1.0*,AZ 145.0,TVD 4696.73
10:30 - 18:30		8.00	DRL	1	DRLIN2	DRLG F/ 4782 TO 5068 (286 FT @ 35.7 FPH) WOB 8-18,GPM 545,RPM 157-50
18:30 - 19:00		0.50	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE
19:00 - 01:30		6.50	DRL	1	DRLIN2	DRLG F/5068 TO 5259 (191 FT @ 29.3 FPH) WOB 10-20,GPM 545,RPM 157-50, WATER FLOW OF 10 BBL/HR @ 5200 FT--OIL WITH IT CAUSING HIGH BACKGROUND GAS OF 4400 UNITS
01:30 - 02:30		1.00	SUR	1	DRLIN2	CIR & SURVEY -- MISRUN
5/23/2008	02:30 - 06:00	3.50	DRL	1	DRLIN2	DRLG F/5259 TO 5355 (96 FT @ 27.4 FPH) WOB 15-18,GPM 545,RPM 157-50
	06:00 - 07:30	1.50	SUR	1	DRLIN2	CIR & SURVEY @ 5270 FT,INC 1.7*,AZ 140.80,TVD 5269.57
	07:30 - 15:00	7.50	DRL	1	DRLIN2	DRLG F/5355 TO 5450 (95 FT @ 12.6 FPH) WOB 12-20,GPM 545-600,RPM 200-235, PUMPING SWEEPS FOR BIT BALLING--RAISING MUD WT TO 9.7 FOR WATER FLOW
	15:00 - 15:30	0.50	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE
	15:30 - 18:00	2.50	DRL	1	DRLIN2	DRLG F/5450 TO 5470 (20 FT @ 8 FPH) WOB 12-20,GPM 600,RPM 218, PUMPING SWEEPS FOR BIT BALLING--RAISING MUD WT TO 9.8 FOR WATER FLOW
	18:00 - 18:30	0.50	OTH		DRLIN2	FLOW CHECK, FLOWING @ 2 BBL/HR
	18:30 - 19:00	0.50	CIRC	1	DRLIN2	CIR BTM'S UP,SPOT 42 BBL 11.8 PPG HEAVY PILL
	19:00 - 19:30	0.50	TRP	10	DRLIN2	TOH TO SHOE,PULL SLOW DUE TO SWABING
	19:30 - 20:00	0.50	OTH		DRLIN2	FLOW CHECK, FLOWING @ 3 BBL/HR
	20:00 - 20:30	0.50	TRP	10	DRLIN2	TIH TO 5470
	20:30 - 00:00	3.50	CIRC	1	DRLIN2	CIR OUT WATER & GAS, 10 FT FLARE WITH 7262 UNITS GAS,RAISE MUD WT TO 10.1 PPG
	5/24/2008	00:00 - 00:30	0.50	OTH		DRLIN2
00:30 - 02:30		2.00	CIRC	1	DRLIN2	CIR,MIX & SPOT 100 BBL 12.1 PPG HEAVY PILL
02:30 - 06:00		3.50	TRP	1	DRLIN2	TOH FOR BIT TO 2700
06:00 - 07:30		1.50	TRP	10	DRLIN2	TOH FOR BIT
07:30 - 09:30		2.00	TRP	10	DRLIN2	M/U BIT & TIH 1440,FILL AT BHA
09:30 - 10:00		0.50	RIG	1	DRLIN2	RIG SERVICE,HYDRULIC LEAK ON TOP DRIVE
10:00 - 15:30		5.50	RIG	2	DRLIN2	RIG REPAIR,LEAK IN HYDRULIC RETURN LINE,INSTALL NEW LINE & TEST TOP DRIVE
15:30 - 18:30		3.00	TRP	10	DRLIN2	TIH F/1440 TO 5355
18:30 - 19:00		0.50	REAM	1	DRLIN2	SAFETY WASH F/5355 TO 5470-NO FILL
19:00 - 06:00		11.00	DRL	1	DRLIN2	DRLG F/5470 TO 5517 (47 FT @ 4.2 FPH) WOB 10-25,GPM 500-585,RPM 184-228

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 End:
 Rig Release:
 Group:
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/25/2008	06:00 - 06:30	0.50	TRP	10	DRLIN2	FLOW CHECK-FLOWING @ 1 BBL/HR
	06:30 - 09:00	2.50	CIRC	1	DRLIN2	CIR,MIX & PUMP 100 BBLs 12.6 PPG HEAVY PILL
	09:00 - 14:00	5.00	TRP	10	DRLIN2	TOH FOR BIT,L/D BIT ,MOTOR,STAB, BIT RINGED OUT IN 11 HRS
	14:00 - 15:00	1.00	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE,CHANGE CORROSION RING
	15:00 - 19:30	4.50	TRP	10	DRLIN2	M/U BIT & MOTOR,TIH TO 5355,BREAK CIR @ 1500
	19:30 - 20:30	1.00	REAM	1	DRLIN2	WASH F/5355 TO 5517--NO FILL. FAN BOTTOM AND BREAK IN BIT
	20:30 - 06:00	9.50	DRL	1	DRLIN2	DRLG F/5517 TO 5638', WOB 30, RPM 162, GPM 460 (121' AT 12.7 FT/HR).
5/26/2008	06:00 - 16:00	10.00	DRL	1	DRLIN2	DRLG F/5638 TO 5725 (87 FT @ 8.7 FPH) WOB 28-35,RPM 166-188,GPM 440-460
	16:00 - 16:30	0.50	SUR	1	DRLIN2	DROP SURVEY,FLOW CHECK-FLOWING 1 BBL/HR
	16:30 - 17:00	0.50	CIRC	1	DRLIN2	CIR OUT GAS, 5530 UNITS--NO FLARE
	17:00 - 17:30	0.50	TRP	10	DRLIN2	TOH F/5725' TO 5256'.
	17:30 - 18:30	1.00	CIRC	1	DRLIN2	CIR OUT GAS & SPOT 100 BBL OF 12.7 PPG HEAVY PILL--5555 UNITS GAS WITH NO FLARE.
	18:30 - 23:00	4.50	TRP	10	DRLIN2	TOH FOR BIT #7. PUMP DRY PIPE SLUG AND PULL ROTATING HEAD.
	23:00 - 03:30	4.50	TRP	10	DRLIN2	M/U BIT & TIH TO 4500
5/27/2008	03:30 - 04:30	1.00	CIRC	1	DRLIN2	FILL PIPE & CIR OUT HEAVY PILL,3130 UNITS GAS WITH 5 FT FLARE
	04:30 - 05:00	0.50	TRP	10	DRLIN2	TIH TO 5543
	05:00 - 06:00	1.00	REAM	1	DRLIN2	WASH F/5543 TO 5725
	06:00 - 15:00	9.00	DRL	1	DRLIN2	DRLG 8.5" HOLE F/5725 TO 5922 (197 FT @ 21.8 FPH) WOB 6-14,RPM 162-206,GPM 400-545,RATTY DRILLING-BOUNCING & TORQUE
	15:00 - 15:30	0.50	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE
	15:30 - 18:00	2.50	DRL	1	DRLIN2	DRLG F/5922 TO 5996'. WOB 8/13, RPM MM 117, ROTARY 50/60, PUMP 420 GPM, PSI 1880 WASATCH @ 5925
	18:00 - 04:00	10.00	DRL	1	DRLIN2	DRILL FROM 5996' TO 6302'. WOB 9/12, ROTARY 45, MUD MOTOR 117, PSI 1650, GPM 420.
5/28/2008	04:00 - 05:00	1.00	SUR	1	DRLIN2	CIR & WIRE LINE SURVEY AT 6217'. INC
	05:00 - 06:00	1.00	DRL	1	DRLIN2	DRLG F/6302 TO 6334
	06:00 - 17:00	11.00	DRL	1	DRLIN2	DRLG F/6334 TO 6586, (252 FT @ 22.9 FPH) WOB 8-14,RPM 157-188,GPM 420-460,BIT BALLING & BOUNCING
	17:00 - 17:30	0.50	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE
	17:30 - 00:00	6.50	DRL	1	DRLIN2	DRLG F/6586 TO 6777, (191 FT @ 29.3 FPH) WOB 8-14, GPM 420-460, BIT BALLING
	00:00 - 01:00	1.00	CIRC	1	DRLIN2	CIRC. OUT SWEEP
	01:00 - 01:30	0.50	SUR	1	DRLIN2	RUN WIRELINE SURVEY
5/29/2008	01:30 - 06:00	4.50	DRL	1	DRLIN2	DRLG F/ 6777 TO 6872 , (95 FT. @ 21.1 FPH) WOB 8-14, GPM 420-460,
	06:00 - 12:30	6.50	DRL	1	DRLIN2	DRLG F/6872 TO 7063 (191 FT @ 29.3 FPH) WOB 8-15,RPM 169-179,GPM 460
	12:30 - 13:00	0.50	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE
	13:00 - 22:00	9.00	DRL	1	DRLIN2	DRLG F/7063 TO 7212 (149 FT @ 16.4 FPH) WOB 8-15, RPM 169-179, GPM 460
	22:00 - 00:00	2.00	CIRC	2	DRLIN2	LOST TOTAL RETURNS @ 7212' PUMPED 2 80 BBL. LCM SWEEPS, (REGAINED FULL RETURNS)
	00:00 - 00:30	0.50	DRL	1	DRLIN2	DRLG F/ 7212 TO 7216 (LOST RETURNS)
	00:30 - 01:30	1.00	CIRC	2	DRLIN2	SPOT 80 BBL LCM SWEEP ON BOTTOM
01:30 - 02:00	0.50	TRP	2	DRLIN2	TRIP OUT OF HOLE 5 STANDS	
02:00 - 06:00	4.00	CIRC	6	DRLIN2	CIRC OVER TOP OF HOLE AND BUILD MUD VOLUME W/ 5% LCM IN ACTIVE, LOST 450 BBL MUD	

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 End:
 Rig Release:
 Group:
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/30/2008	06:00 - 07:30	1.50	CIRC	1	DRLIN2	CIR & BUILD VOLUME W/5% LCM,CIRC OUT 50 BBL WATER
	07:30 - 08:00	0.50	TRP	2	DRLIN2	TIH 5 STDS
	08:00 - 20:00	12.00	DRL	1	DRLIN2	DRLG F/7216 TO 7439 (223 FT @ 18.5 FPH) WOB 8-18 RPM 167 GPM 460
	20:00 - 21:00	1.00	CIRC	1	DRLIN2	PUMP 10 BBL SWEEP & CIRC. OUT F/ SURVEY
	21:00 - 21:30	0.50	SUR	1	DRLIN2	WIRE LINE SURVEY @ 7264
	21:30 - 06:00	8.50	DRL	1	DRLIN2	DRLG F/ 7439 TO 7500 (61 FT @ 7.1 FPH) WOB 8 -18 RPM 167 RPM, GPM 460
5/31/2008	06:00 - 12:00	6.00	DRL	1	DRLIN2	DRLG F/7500 TO 7635 (135 FT @ 22.5 FPH) WOB 9-15,RPM178,GPM 460
	12:00 - 12:30	0.50	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE
	12:30 - 04:30	16.00	DRL	1	DRLIN2	DRLG F/7635 TO 7922 (287 FT @ 17.9 FPH) 8-18,RPM165-180,GPM 460
6/1/2008	04:30 - 05:00	0.50	CIRC	1	DRLIN2	CIR FOR SURVEY
	05:00 - 06:00	1.00	SUR	1	DRLIN2	SURVEY @ 7837, INC 1.5*, AZ 139.8, TVD 7835.65
	06:00 - 12:00	6.00	DRL	1	DRLIN2	DRLG F/7922 TO 8008 (86 FT @ 14.3 FPH) WOB 12-18,RPM 173,GPM 460
	12:00 - 13:30	1.50	CIRC	1	DRLIN2	FLOW CHECK,CIR BTM UP,FLOWING .5 BBL/HR
	13:30 - 14:30	1.00	TRP	10	DRLIN2	TOH WET F/8008 TO 7158
	14:30 - 15:00	0.50	CIRC	1	DRLIN2	SPOT 75 BBL LCM PILL
	15:00 - 16:00	1.00	TRP	10	DRLIN2	TOH TO 5253
	16:00 - 18:00	2.00	CIRC	1	DRLIN2	CIR OUT GAS & WATER,SPOT 100 BBL 12.7 HEAVY PILL,6572 UNITS GAS W/6 FT FLARE,20 BBL WATER
	18:00 - 20:30	2.50	TRP	10	DRLIN2	TOH F/ 5256 TO 1438, FLOW CHECK, PUMP 20 BBL. SLUG
	20:30 - 02:30	6.00	ISP	1	DRLIN2	INSPECT B.H.A. LAYED DOWN 1 JT. HWDP,(UNDER SIZED TOOLJOINT 5 7/8") P/U 1 JT. TO REPLACE
6/2/2008	02:30 - 06:00	3.50	TRP	2	DRLIN2	SWAP OUT MTRS. AND TIH W/ BIT #9
	06:00 - 06:30	0.50	TRP	10	DRLIN2	TIH TO 3000 FT
	06:30 - 07:00	0.50	OTH	10	DRLIN2	CHANGE OUT & INSTALL ROTATING HEAD
	07:00 - 08:00	1.00	TRP	10	DRLIN2	TIH TO 4500
	08:00 - 09:00	1.00	RIG	6	DRLIN2	SLIP & CUT 108 FT DRILLING LINE
	09:00 - 09:30	0.50	RIG	1	DRLIN2	SERVICE RIG,ALIGN TOP DRIVE TRACK
	09:30 - 10:00	0.50	TRP	10	DRLIN2	TIH TO 5100
	10:00 - 10:30	0.50	CIRC	1	DRLIN2	CIR OUT HEAVY PILL,5310 UNITS GAS WITH 25 FT FLARE
	10:30 - 12:30	2.00	TRP	10	DRLIN2	TIH TO 7922
	12:30 - 13:00	0.50	REAM	1	DRLIN2	WASH F/7922 TO 8008,15 FT FILL
	13:00 - 06:00	17.00	DRL	1	DRLIN2	DRLG F/8008 TO 8290 (282 FT @ 16.5 FPH) 8-12 WOB, GPM 457, RPM 155
	6/3/2008	06:00 - 11:30	5.50	DRL	1	DRLIN2
11:30 - 12:00		0.50	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE
12:00 - 15:30		3.50	DRL	1	DRLIN2	DRLG F/8405 TO 8465 (60 FT @ 17.1 FPH) WOB 9-15,RPM 150-165,GPM 482
15:30 - 17:00		1.50	CIRC	1	DRLIN2	CIR AT REDUCED RATE & MIX LCM,LOST 100 BBL MUD
17:00 - 19:30		2.50	DRL	1	DRLIN2	DRLG F/8465 TO 8499 (34 FT @ 13.6 FPH) WOB 8 - 14, RPM 150-165, GPM 482
19:30 - 21:00		1.50	SUR	1	DRLIN2	PUMP SWEEP & SURVEY @ 8414' (INC. 1.6 AZ. 153.70 , TVD 8412.44
6/4/2008	21:00 - 06:00	9.00	DRL	1	DRLIN2	DRLG F/ 8499 TO 8670 (171 ft @ 19 FPH) WOB 8-15, RPM 150-160, GPM 482
	06:00 - 13:30	7.50	DRL	1	DRLIN2	DRLG F/8670 TO 8786 (116 FT @ 15.4 FPH) WOB 8-16,RPM 140-170,GPM 440-482
	13:30 - 14:30	1.00	RIG	1	DRLIN2	SERVICE RIG & TOP DRIVE,CHANGE THROW AWAY SUB

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 End:
 Rig Release:
 Group:
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations	
6/4/2008	14:30 - 06:00	15.50	DRL	1	DRLIN2	DRLG F/8786 TO 9060 (274 FT @ 17.6 FPH) WOB 10-14,RPM 175,GPM 482,TOP OF MESAVERDE @ 8839	
6/5/2008	06:00 - 06:30	0.50	DRL	1	DRLIN2	DRLG. F/9060' TO 9073' (13 FT. @ 26 FPH)WOB 20,RPM 153,SPM 100,2100 PSI @ 407 GPM	
	06:30 - 07:30	1.00	CIRC	1	DRLIN2	CIRC. & SWEEP HOLE FOR SURVEY	
	07:30 - 08:30	1.00	SUR	1	DRLIN2	RUN WIRELINE SURVEY AT 9073 FT.	
	08:30 - 13:00	4.50	DRL	1	DRLIN2	DRLG. F/ 9073' TO 9169' (96 FT. @ 21.3 FPH) WOB 20,RPM 153,SPM 100,2100 PSI @ 407 GPM	
	13:00 - 13:30	0.50	RIG	1	DRLIN2	RIG SERVICE	
6/6/2008	13:30 - 06:00	16.50	DRL	1	DRLIN2	DRLG. F/ 9169' TO 9525' (356 FT. @ 21.57 FPH) WOB 20,RPM 153,SPM 100,2100 PSI @ 407 GPM,NO LOSS'S AND MAINTAINING 6% LCM WITH OIL SHOWS AT SHAKER.	
	06:00 - 15:30	9.50	DRL	1	DRLIN2	DRLG. F/ 9525' TO 9741' (216 FT. @ 22.73 FPH) WOB 15/22,RPM 155,SPM 100,PSI 2250,440 GPM	
	15:30 - 16:00	0.50	RIG	1	DRLIN2	RIG SERVICE	
	16:00 - 20:30	4.50	DRL	1	DRLIN2	DRLG. F/ 9741' TO 9785' (44 FT. @ 9.77 FPH) WOB 10/20,RPM 155,SPM 110,PSI 2250,461 GPM	
	20:30 - 21:30	1.00	CIRC	1	DRLIN2	CIRC BTMS UP AND FLOW CHECK	
	21:30 - 22:00	0.50	SUR	1	DRLIN2	DROP SURVEY	
	22:00 - 01:30	3.50	TRP	10	DRLIN2	TRIP OUT TO 5200 FT.	
	01:30 - 02:30	1.00	CIRC	1	DRLIN2	CIRC. BTMS UP AND SPOT HEAVY PILL	
	02:30 - 03:00	0.50	TRP	10	DRLIN2	TRIP TO CASING SHOE	
	03:00 - 03:30	0.50	OTH		DRLIN2	PULL ROTATING HEAD	
	03:30 - 06:00	2.50	TRP	10	DRLIN2	TRIP OUT FOR BIT	
	6/7/2008	06:00 - 07:00	1.00	TRP	10	DRLIN2	TOH F/BIT
		07:00 - 08:00	1.00	TRP	1	DRLIN2	CHANGE OUT MOTORS & BITS
		08:00 - 12:00	4.00	TRP	2	DRLIN2	TIH TO 5200 FT
		12:00 - 13:00	1.00	CIRC	1	DRLIN2	CIRC OUT HEAVY PILL
13:00 - 15:30		2.50	TRP	2	DRLIN2	TIH W/BIT#10 TO 9645'	
15:30 - 16:00		0.50	REAM	1	DRLIN2	WASH & REAM FROM 9645' TO 9785' (140 FT. 10 FILL)	
16:00 - 17:00		1.00	CIRC	1	DRLIN2	CIRC BTM'S UP AT 9785 FT.	
17:00 - 01:00		8.00	DRL	1	DRLIN2	DRLG. F/ 9785' TO 10,028' (243 FT. @ 30.37 FPH) WOB 6/12,RPM 132,SPM 120,PSI 2700 AT 503 GPM	
01:00 - 01:30		0.50	RIG	1	DRLIN2	RIG SERVICE	
01:30 - 05:00		3.50	DRL	1	DRLIN2	DRLG. F/ 10,028' TO 10,106' (78 FT. @ 19.5 FPH) WOB 6/12,RPM 132,SPM 120,PSI 2700 AT 482 GPM	
6/8/2008	05:00 - 06:00	1.00	RIG	2	DRLIN2	WORK ON PUMPS	
	06:00 - 07:00	1.00	DRL	1	DRLIN2	DRLG. F/ 10,106' TO 10,122' (16 FT. @ 16 FPH) WOB 6/12,RPM 130,SPM 115,PSI 2700,AT 482 GPM	
	07:00 - 09:00	2.00	RIG	2	DRLIN2	WORK ON PUMPS	
6/9/2008	09:00 - 06:00	21.00	DRL	1	DRLIN2	DRLG. F/ 10,122' TO 10,532 (410 FT. @ 18.6 FPH) WOB 6/12,RPM 132,SPM 115,PSI 2600,AT 482	
	06:00 - 16:30	10.50	DRL	1	DRLIN2	DRLG. F/ 10,532' TO 10,694' (162 FT. @ 15.42 FPH) WOB 14/18,RPM 132,SPM 115,PSI 2560 AT 482 GPM	
	16:30 - 17:00	0.50	RIG	1	DRLIN2	RIG SERVICE	
6/10/2008	17:00 - 06:00	13.00	DRL	1	DRLIN2	DRLG. F/ 10,694' TO 10,885' (353 FT. @ 15.02 FPH) WOB 14/18,RPM 132,SPM 115,PSI 2850 AT 482 GPM	
	06:00 - 12:30	6.50	DRL	1	DRLIN2	DRLG. F/ 10,885' TO 10,981' (96 FT. @ 14.76 FPH) WOB 14/18,RPM 132,SPM 115,PSI 3000 AT 482 GPM	
	12:30 - 13:00	0.50	RIG	1	DRLIN2	RIG SERVICE	
6/11/2008	13:00 - 06:00	17.00	DRL	1	DRLIN2	DRLG. F/ 10,981' TO 11,207' (226 FT. @13.29 FPH) WOB 14/18,RPM 132,SPM 115,PSI 3000 AT 482 GPM	
	06:00 - 09:30	3.50	DRL	1	DRLIN2	DRLG. F/ 11,207' TO 11,267' (60 FT. AT 17.14 FPH) WOB 20,RPM	

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 End:
 Rig Release:
 Group:
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
6/11/2008	06:00 - 09:30	3.50	DRL	1	DRLIN2	132,SPM 115,PSI 2850 AT 482 GPM
	09:30 - 10:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	10:00 - 16:00	6.00	DRL	1	DRLIN2	DRLG. F/ 11,267' TO 11,322' (55 FT. AT 9.16 FPH) WOB 20,RPM 132,SPM 115,PSI 2850 AT 482 GPM
	16:00 - 17:00	1.00	CIRC	1	DRLIN2	CIRCULATE BTM'S UP
	17:00 - 17:30	0.50	SUR	1	DRLIN2	DROP SURVEY
	17:30 - 18:00	0.50	TRP	2	DRLIN2	PULL 8 STD'S TO 10,504'
	18:00 - 20:00	2.00	CIRC	1	DRLIN2	CIRC. BTMS UP AND SPOT 150 BBL. HEAVY PILL
	20:00 - 21:00	1.00	CIRC	1	DRLIN2	SPOT 150 BBL.HEAVY PILL
	21:00 - 00:00	3.00	TRP	10	DRLIN2	TRIP OUT TO 5200 FT.
	00:00 - 01:00	1.00	CIRC	1	DRLIN2	CIRCULATE BTM'S UP
	01:00 - 02:30	1.50	CIRC	1	DRLIN2	PUMP AND SPOT HEAVY PILL AT 5200 FT.
	02:30 - 06:00	3.50	TRP	10	DRLIN2	TRIP OUT FOR BIT # 11
	6/12/2008	06:00 - 06:30	0.50	TRP	10	DRLIN2
06:30 - 07:30		1.00	TRP	1	DRLIN2	CHANGE OUT BITS & MOTOR
07:30 - 10:30		3.00	TRP	2	DRLIN2	TIH TO 4497 FT
10:30 - 11:30		1.00	RIG	6	DRLIN2	SLIP & CUT DRLG LINE 108 FT
11:30 - 12:00		0.50	OTH		DRLIN2	CHANGE OUT CORRISON RING
12:00 - 13:30		1.50	TRP	2	DRLIN2	TIH TO 6000 FT
13:30 - 14:00		0.50	CIRC	1	DRLIN2	CIR BTM'S UP
14:00 - 14:30		0.50	TRP	2	DRLIN2	TIH TO 6650 FT, HIT BRIDGE
14:30 - 15:00		0.50	REAM	1	DRLIN2	WASH & REAM F/6650 FT TO 6702, LOST RETURNS, TOTAL MUD LOST 800 BBL
15:00 - 17:00		2.00	REAM	1	DRLIN2	BACK REAM F/6702 TO 6663, HOLE PACKED OFF
17:00 - 17:30		0.50	CIRC	1	DRLIN2	SPOT LCM PILL
17:30 - 18:00		0.50	TRP	2	DRLIN2	TOH TO 6250 FT
18:00 - 01:30		7.50	CIRC	6	DRLIN2	BUILD MUD VOLUME
6/13/2008	01:30 - 03:00	1.50	REAM	1	DRLIN2	WASH & REAM FROM 6305' TO 6681'
	03:00 - 04:00	1.00	CIRC	1	DRLIN2	CIRCULATE BTM'S UP AT 6681'
	04:00 - 06:00	2.00	REAM	1	DRLIN2	WASH & REAM FROM 6681' TO 6900'
	06:00 - 09:30	3.50	REAM	1	DRLIN2	WASH & REAM F/7060 TO 7875, LOST RETURNS
	09:30 - 11:00	1.50	REAM	1	DRLIN2	BACK REAM F/7875 TO 7827
	11:00 - 15:30	4.50	CIRC	1	DRLIN2	CIR, FULL RETURNS, RAISE LCM TO 6%, CUT MUD WT TO 10.3
	15:30 - 16:00	0.50	REAM	1	DRLIN2	WASH & REAM F/7827 TO 7931
	16:00 - 20:30	4.50	CIRC	1	DRLIN2	CIR TWO HI VIS SWEEPS
	20:30 - 21:00	0.50	REAM	1	DRLIN2	WASH & REAM F/7931 TO 8090
	21:00 - 22:00	1.00	TRP	2	DRLIN2	TIH TO 9200 FT
	22:00 - 00:00	2.00	CIRC	1	DRLIN2	CIR OUT HEAVY PILL THROUGH CHOKE, MAX FLARE 45 FT, 85 BBL GAIN
	00:00 - 01:00	1.00	TRP	2	DRLIN2	TIH TO 10313 FT
	01:00 - 02:30	1.50	CIRC	1	DRLIN2	CIR OUT HEAVY PILL THROUGH CHOKE, MAX FLARE 45 FT, 100 BBL GAIN
6/14/2008	02:30 - 03:30	1.00	TRP	2	DRLIN2	TIH TO 11265 FT
	03:30 - 05:30	2.00	CIRC	1	DRLIN2	CIR BTM'S UP THROUGH CHOKE 50 BBL GAIN, 40 FT FLARE
	05:30 - 06:00	0.50	REAM	1	DRLIN2	WASH & REAM F/11265 TO 11322
	06:00 - 07:30	1.50	DRL	1	DRLIN2	DRLG. F/ 11,322' TO 11,360' (38 FT.@ 25.33 FPH) WOB 6/8,RPM 129,SPM 110 AT 2750 PSI AT 460 GPM
	07:30 - 08:00	0.50	RIG	1	DRLIN2	RIG SERVICE
	08:00 - 11:00	3.00	DRL	1	DRLIN2	DRLG. F/ 11,360' TO 11,365' (5 FT.@ 1.6 FPH) BIT QUIT,TRIED VARIOUS PARAMETERS
	11:00 - 13:00	2.00	CIRC	1	DRLIN2	CIRCULATE AND RAISE VISCOSITY IN ACTIVE SYSTEM
	13:00 - 14:00	1.00	CIRC	1	DRLIN2	PUMP AND SPOT HEAVY ECD PILL
	14:00 - 16:30	2.50	TRP	2	DRLIN2	TRIP OUT TO 8000 FT. (HOLE NOT TAKING FLUID)

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 End:
 Rig Release:
 Group:
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
6/14/2008	16:30 - 18:00	1.50	CIRC	1	DRLIN2	CIRCULATE BTM'S UP AT 8,000 FT.
	18:00 - 19:30	1.50	TRP	2	DRLIN2	T.O.H TO 5200 FT.
	19:30 - 21:00	1.50	CIRC	1	DRLIN2	CIRCULATE BTM'S UP AND SPOT HEAVY ECD PILL.
	21:00 - 01:00	4.00	TRP	2	DRLIN2	FINISH TRIP OUT WITH BIT # 11
	01:00 - 02:00	1.00	TRP	1	DRLIN2	CHANGE OUT MUD MTR'S AND BITS
6/15/2008	02:00 - 06:00	4.00	TRP	2	DRLIN2	TRIP IN WITH BIT # 12
	06:00 - 07:00	1.00	CIRC	1	DRLIN2	CIRCULATE BTMS UP AT 5545'
	07:00 - 10:00	3.00	TRP	2	DRLIN2	TRIP IN HOLE TO 8235'
	10:00 - 11:00	1.00	CIRC	1	DRLIN2	CIRCULATE OUT GAS AT 8235'
	11:00 - 12:30	1.50	TRP	2	DRLIN2	TRIP IN FROM 8235' TO 9500'
	12:30 - 15:00	2.50	CIRC	1	DRLIN2	CIRCULATE HEAVY PILL OUT AT 9500'
	15:00 - 16:30	1.50	TRP	2	DRLIN2	TRIP IN HOLE FROM 9500' TO 11,200'
	16:30 - 17:00	0.50	REAM	1	DRLIN2	WASH & REAM 11,200' TO 11,356'
	17:00 - 17:30	0.50	CIRC	1	DRLIN2	CIRCULATE BTM'S UP AT 11,356'
	17:30 - 18:00	0.50	CIRC	1	DRLIN2	SHUT IN WELL & CIRCULATE OUT GAS
	18:00 - 18:30	0.50	REAM	1	DRLIN2	WASH & REAM 11,356' TO 11,365'
18:30 - 06:00	11.50	DRL	1	DRLIN2	DRLG. F/ 11,365' TO 11,454' (89 FT.@ 7.7 FPH (WOB 10/12.RPM 611,SPM 65X65 AT 3300 PSI AT 544 GPM.	
6/16/2008	06:00 - 06:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	06:30 - 18:00	11.50	DRL	1	DRLIN2	DRILG. F/ 11,454' TO 11,552' (98 FT@8.52 FPH)WOB 12,RPM 594,SPM 65X65,PSI 3300 AT 544 GPM.
	18:00 - 18:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	18:30 - 06:00	11.50	DRL	1	DRLIN2	DRILG. F/ 11,552' TO 11,640' (88 FT@7.65 FPH)WOB 12,RPM 594,SPM 65X65,PSI 3300 AT 544 GPM.
6/17/2008	06:00 - 06:30	0.50	RIG	1	DRLIN2	RIG SERVICE
	06:30 - 09:30	3.00	DRL	1	DRLIN2	DRLG F/ 11,640' TO 11,657' (17 FT.@ 5.6 FPH) WOB 13,RPM 563,SPM 60X60 @ 503 GPM @ 3500 PSI
	09:30 - 10:00	0.50	CIRC	1	DRLIN2	CIRCULATE AND CHECK DIFF.PRESSURE
	10:00 - 10:30	0.50	SUR	1	DRLIN2	DROP SURVEY
	10:30 - 12:00	1.50	CIRC	1	DRLIN2	CIRCULATE BTM'S UP AT 11,657'
	12:00 - 12:30	0.50	CIRC	1	DRLIN2	PUMP & SPOT HEAVY PILL
	12:30 - 17:30	5.00	TRP	2	DRLIN2	TRIP OUT TO 5200 FT.
	17:30 - 18:30	1.00	CIRC	1	DRLIN2	CIRCULATE BTM'S UP AT 5200 FT. AND SPOT 98 BBL. HEAVY PILL
	18:30 - 23:00	4.50	TRP	2	DRLIN2	FINISH TRIP OUT
	23:00 - 00:00	1.00	TRP	1	DRLIN2	CHANGE OUT BITS & MUD MTR'S
	00:00 - 02:30	2.50	TRP	2	DRLIN2	TIH TO 2000 FT
6/18/2008	02:30 - 03:30	1.00	OTH		DRLIN2	CHANGE OUT SAVER SUB & CORR. RINGKK
	03:30 - 05:00	1.50	TRP	2	DRLIN2	TRIP TO CSG. SHOE
	05:00 - 06:00	1.00	RIG	6	DRLIN2	CUT & SLIP DRLG. LINE
	06:00 - 06:30	0.50	OTH		DRLIN2	CENTER UP TOP DRIVE OVER HOLE
	06:30 - 10:00	3.50	OTH		DRLIN2	CHANGE OUT LWC VALVE ON TOP DRIVE
	10:00 - 10:30	0.50	TRP	2	DRLIN2	TIH TO 5200 FT.
	10:30 - 11:30	1.00	CIRC	1	DRLIN2	CIRCULATE BTM'S UP AT 5200 FT.
	11:30 - 14:00	2.50	TRP	2	DRLIN2	TIH TO 9415 FT.
	14:00 - 15:30	1.50	CIRC	1	DRLIN2	CIRCULATE BTM'S UP AT 9415 FT.
	15:30 - 17:30	2.00	TRP	2	DRLIN2	TIH TO 11,609 FT.
	17:30 - 19:00	1.50	CIRC	1	DRLIN2	CIRCULATE BTM'S UP THROUGH CHOKE
	19:00 - 19:30	0.50	REAM	1	DRLIN2	WASH FROM 11,645' TO 11,609'
	19:30 - 06:00	10.50	DRL	1	DRLIN2	DRLG. F / 11,657' TO 11,727' (70 @ 6.66 FPH) WOB 15,RPM 604,SPM 65X65 @ 3440 PSI @ 544 GPM
	6/19/2008	06:00 - 12:00	6.00	DRL	1	DRLIN2
12:00 - 13:30		1.50	CIRC	1	DRLIN2	CIRC. BTMS UP

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 End:
 Rig Release:
 Group:
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
6/19/2008	13:30 - 14:30	1.00	TRP	14	DRLIN2	SHORT TRIP 10 STANDS
	14:30 - 17:00	2.50	CIRC	1	DRLIN2	CIRC. BTMS. UP, SPOT 150 BBL. 12.5# PILL
	17:00 - 21:00	4.00	TRP	2	DRLIN2	T.O.O.H. TO 5200' (SLM)
	21:00 - 22:00	1.00	CIRC	1	DRLIN2	CIRC. BTMS UP SPOT 100 BBL. 12.5# PILL
	22:00 - 02:30	4.50	TRP	2	DRLIN2	T.O.O.H. (SLM 11771,72) & LAY DOWN MONEL AND MUD MOTOR
	02:30 - 06:00	3.50	LOG	1	DRLIN2	SAFETY MEETING W/ LOGGERS, INSTALL LOGGING
						ADAPTER,R.U. LOGGERS AND LOG, LOGGERS DEPTH 11780'
6/20/2008	06:00 - 08:30	2.50	LOG	1	EVAL 2	LOG WITH TRIPPLE COMBO
	08:30 - 09:00	0.50	LOG	1	EVAL 2	RIG DOWN HALLIB LOGERS
	09:00 - 12:30	3.50	TRP	15	DRLIN2	M/U BIT & TIH TO 6031,FILL PIPE @ 2000
	12:30 - 13:30	1.00	CIRC	1	DRLIN2	CIR OUT HEAVY PILL @ 6031
	13:30 - 15:30	2.00	TRP	15	DRLIN2	TIH TO 9505
	15:30 - 17:00	1.50	CIRC	1	DRLIN2	CIR OUT HEAVY PILL & GAS THROUGH CHOKE
	17:00 - 18:00	1.00	TRP	15	DRLIN2	TIH TO 11695
	18:00 - 18:30	0.50	REAM	1	DRLIN2	WASH F.11695 TO 11776,10 FT FILL
	18:30 - 22:00	3.50	CIRC	1	DRLIN2	CIR OUT HEAVY PILL & GAS THROUGH CHOKE SPOT 150 BBL.
	22:00 - 05:00	7.00	TRP	3	DRLIN2	LAY DOWN 4.5" DRILL PIPE
6/21/2008	05:00 - 06:00	1.00			DRLIN2	CIRC. BTMS UP AT 5200', SPOT 100 BBL 12.5# PILL
	06:00 - 11:30	5.50	TRP	3	DRLIN2	TOH LAYING DOWN DP & BHA
	11:30 - 12:30	1.00	OTH		DRLIN2	PULL WEAR BUSHING
	12:30 - 16:00	3.50	CSG	1	CSGIN2	S/M,RIG UP FRANK'S CASING CREW, CENTER TOPDRIVE RAIL
6/22/2008	16:00 - 06:00	14.00	CSG	2	CSGIN2	RUN 7" CASING W/ FRANKS
	06:00 - 06:30	0.50	CSG	2	CSGIN2	RUN CASING F/ 11497 TO 11761 (265 JTS. RAN)
6/22/2008	06:30 - 08:00	1.50	CSG	2	CSGIN2	LAND CASING, TOP SEAL OF HANGER DAMAGED, REPLACE SEAL AND RELAND CASING
	08:00 - 09:00	1.00	CSG	1	CSGIN2	RIG DOWN CASING CREW
	09:00 - 13:30	4.50	CMT	1	CSGIN2	RIG UP CEMENTERS (HALLIBURTON)
	13:30 - 14:00	0.50	CSG	1	CSGIN2	L/D FILL UP TOOL
	14:00 - 14:30	0.50	RIG	7	CSGIN2	SAFETY MEETING W/ HALLIBURTON,RIG CREW AND CO. REP.
	14:30 - 19:30	5.00	CMT	2	CSGIN2	PRESS TEST CEMENT LINES TO 6000 PSI,NO2 LINES TO 8000 PSI AND CEMENT PUMP 10 BBL FRESH WATER AHEAD,30 BBL SUPERFLUCH ,10 BBL FRESH WATER BEHIND,PUMP FOAM SCAVENGER 115 SKS. @ 7.0 PPG, PUMP 1ST. LEAD 400 SKS @ 9.5PPG, PUMPED 2ND. FOAMED LEAD 1600 SKS @ 11.0 PPG PUMP UNFOAMED TAIL 200 SKS. @ 14.3 PPG, DISPLACED W/ 442 BBL. FRESH WATER,BUMP PLUG AND HOLD F/ 5 MIN. FLOATS HELD, PUMP CAP CEMENT 200 SKS @ 14.6 PPG
	19:30 - 20:00	0.50	OTH		CSGIN2	L/D LANDING JOINT
	20:00 - 04:00	8.00	BOP	1	CSGIN2	NIPPLE DOWN BOP, LAY DOWN ROTATINGHEAD , PULL OUT SPACER SPOOL AND REPLACE WITH C-SECTION
	04:00 - 06:00	2.00	BOP	1	CSGIN2	NIPPLE UP BOP AND TEST C-SECTION
	6/23/2008	06:00 - 08:00	2.00	BOP	2	DRLPRO
08:00 - 10:00		2.00	OTH		DRLPRO	PREPARE TOPDRIVE FOR TESTING, CHANGE DIES, THROW AWAY SUB HANG BAILS AND ELEVATORS
10:00 - 16:00		6.00	BOP	2	DRLPRO	BREAKOUT TESTERS SUB & RIG UP BOP TESTERS,TEST ANN. TO 5000 PSI 10 MIN 250 PSI 5 MIN, MUD LINES TO 3500 PSI, BLIND RAMS, UPPER AND LOWER PIPE RAMS 10,000 PSI HIGH TEST 250 PSI LOW TEST,CHOKE,BOP INNER VALVE, KILL LINE TO 10,000 PSI HIGH TEST, 250 PSI LOW TEST, TOPDRIVE VALVES, FLOOR VALVE TIW VALVE 10,000 PSI HIGH, 250 PSI LOW, TEST CASING TO 2600 PSI FOR 30 MIN.
6/23/2008	16:00 - 18:00	2.00	OTH		DRLPRO	RIG UP FLARE LINES AND BUSTER

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Spud Date: 4/12/2008
 Start: 4/12/2008
 End:
 Rig Release:
 Group:
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
6/23/2008	18:00 - 23:00	5.00	BOP	1	DRLPRO	NIPPLE UP ROTATINGHEAD, ORBIT VALVE AND FLOW LINE
	23:00 - 06:00	7.00	CIRC	6	DRLPRO	BUILD MUD VOLUME, WORK ON GAS BUSTER,
6/24/2008	06:00 - 06:00	24.00	OTH		DRLPRO	HELP WELDERS RIG UP FLOW LINE, DRIP PAN, SHAKER TROUGH, FINISH GAS BUSTER, HOOK UP FLARE LINES, INSTALL ROTATINGHEAD BEARING PACK, LOAD PIPE RACKS WITH 4 3/4" BHA AND STRAP. WT. UP MUD TO 13.5# PPG. (TWO HANDS SHORT ON MORNING TOUR)
6/25/2008	06:00 - 11:00	5.00	OTH		DRLPRO	STRAP PIPE, WT. UP MUD TO 13.6#, R/U FLARE IGNITER,INSTALL WEAR BUSHING,R/U FILLUP LINE
	11:00 - 12:00	1.00	RIG	1	DRLPRO	LUBRICATE DRAWWORKS AND TOP DRIVE
	12:00 - 20:00	8.00	RIG	2	DRLPRO	WORK ON TOP DRIVE W/ CANRIG ELECTRICIAN
	20:00 - 00:00	4.00	TRP	1	DRLPRO	CHANGE ELEVATORS , RUN IN HOLE TO 1258' FILL PIPE
	00:00 - 02:00	2.00	RIG	2	DRLPRO	CENTER TOPDRIVE RAIL, IDM HAND LOADED POWER LIMIT SOFTWARE,
6/26/2008	02:00 - 06:00	4.00	TRP	2	DRLPRO	PICKUP 4" DRILL PIPE
	06:00 - 10:00	4.00	TRP	2	DRLPRO	PICKUP D.P. TO 6257
	10:00 - 11:00	1.00	RIG	1	DRLPRO	RIG SERVICE
	11:00 - 18:30	7.50	TRP	2	DRLPRO	PICKUP 4" D.P., TAGGED UP AT 11,520'
	18:30 - 19:00	0.50	RIG	2	DRLPRO	WORK ON POWER LIMIT W/ IDM HAND
	19:00 - 20:00	1.00	OTH		DRLPRO	INSTALL ROTATINGHEAD RUBBER
	20:00 - 21:30	1.50	CIRC	1	DRLPRO	DISPLACE WATER WITH 13.5# MUD IN CASING
	21:30 - 06:00	8.50	RIG	2	DRLPRO	WORK ON POWER LIMIT, TRY AND PULL TORQUE BOOST, WOULD NOT COME OUT, WAIT ON MECHANIC
6/27/2008	06:00 - 06:00	24.00	RIG	2	DRLPRO	PULL TORQ, BOOST, INSPECT BULL GEAR,TAKE OFF KELLY HOSE, PULL GUARD OFF TOPDRIVE BREAK MTR. BOLTS, CLEAN TOPDRIVE, SHIM MOTOR, INSUFFICIENT BACKLASH, REMOVE GUARD TO CHANGE OUT MOTOR,
6/28/2008	06:00 - 04:30	22.50	RIG	2	DRLPRO	CHANGE OUT TOPDRIVE TRACTION MOTOR,
	04:30 - 06:00	1.50	OTH		DRLPRO	STRING BLOCKS BACK TO 10 LINES
6/29/2008	06:00 - 07:00	1.00	OTH		DRLPRO	STRING UP ON 10 LINES
	07:00 - 13:00	6.00	RIG	2	DRLPRO	CONTINUE HOOKING UP TOP DRIVE & TEST
	13:00 - 19:30	6.50	RIG	2	DRLPRO	IDM REPROGRAMING TLC
	19:30 - 22:30	3.00	REAM	1	DRLPRO	SAFETY REAM F/ 11,520 TO 11,667, DRILL FLOAT EQUIP @ 11,667', AND FLOAT SHOE.@ 11,776'
	22:30 - 23:00	0.50	DRL	1	DRLPRO	DRLG F/ 11,776' TO 11,787' (10K WOB, 80 RPM 65 SPM)
	23:00 - 23:30	0.50	CIRC	1	DRLPRO	CIRC BOTTOMS UP
	23:30 - 00:00	0.50	EQT	2	DRLPRO	PREFORM F.I.T. (1170 PSI E.M.W. 15.5 HELD F/ 15 MIN.)
	00:00 - 05:00	5.00	DRL	1	DRLPRO	DRILL F/ 11,787 TO 11,874 (103' @ 17.1 FPH) 10K WOB 80 RPM 65 SPM
	05:00 - 05:30	0.50	RIG	1	DRLPRO	RIG SERVICE
	05:30 - 06:00	0.50	DRL	1	DRLPRO	DRLG F/ 11,874 TO 11,890 (16' @ 32 FPH) 10K WOB 80 RPM 65 SPM
6/30/2008	06:00 - 14:00	8.00	DRL	1	DRLPRO	DRLG F/11890 TO 12073 (183 FT @ 22.8 FPH) WOB 12-14,RPM 70-90,GPM 210-228
	14:00 - 14:30	0.50	RIG	1	DRLPRO	SERVICE RIG & TOP DRIVE
	14:30 - 19:00	4.50	DRL	1	DRLPRO	DRLG F/12073 TO 12,200 (127 @ 50.8 FPH) WOB 12-14, RPM 70 - 90, GPM 210-228
	19:00 - 20:30	1.50	CIRC	5	DRLPRO	CIRC. UP A SAMPLE @ 12,200'
	20:30 - 21:30	1.00	EQT	2	DRLPRO	PREFORM F.I.T. 15.4 E.M.W.
	21:30 - 23:30	2.00	CIRC	1	DRLPRO	CIRC. BTMS UP
	23:30 - 00:00	0.50	OTH		DRLPRO	FLOW CHECK (1" STREAM) TOH 4 STANDS
	00:00 - 01:30	1.50	CIRC	1	DRLPRO	DISPLACE WATER MUD W/ INVERT MUD
	01:30 - 05:00	3.50	CIRC	1	DRLPRO	CIRC. 2 BTMS UP AND BUILD E.C.D. PILL

Operations Summary Report

Legal Well Name: WV 7BD-23-8-21
 Common Well Name: WV 7BD-23-8-21
 Event Name: DRILLING
 Contractor Name: SST Energy
 Rig Name: SST

Start: 4/12/2008
 Rig Release:
 Rig Number: 66

Spud Date: 4/12/2008
 End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
6/30/2008	05:00 - 06:00	1.00	CIRC	1	DRLPRO	BUILD AND SPOT 75 BBL 15.5 PPG ECD PILL @ 11773
7/1/2008	06:00 - 07:00	1.00	TRP	10	DRLPRO	TOH F/11760 TO 9929
	07:00 - 07:30	0.50	CIRC	1	DRLPRO	MIX DRY PILL
	07:30 - 08:30	1.00	RIG	1	DRLPRO	SERVICE RIG & TOP DRIVE
	08:30 - 14:00	5.50	TRP	10	DRLPRO	TOH F/9929,PULL ROTATING HEAD
	14:00 - 14:30	0.50	TRP	1	DRLPRO	CHANGE BIT & P/U MOTOR
	14:30 - 20:30	6.00	TRP	10	DRLPRO	TIH W/ BIT #16 TO 11761
	20:30 - 21:30	1.00	CIRC	1	DRLPRO	CIRC GAS OUT @ 11761 4450 UNITS GAS WITH A 40' FLARE,
	21:30 - 03:30	6.00	RIG	2	DRLPRO	WAIT ON REGULATOR BOARD F/ MUD PUMPS (IDM CHANGED BOARD OUT @ 0300)
	03:30 - 04:00	0.50	TRP	2	DRLPRO	T.I.H. SAFETY REAM F/ 12102 TO 12200
	04:00 - 06:00	2.00	DRL	1	DRLPRO	DRLG F/ 12200' TO 12276 (76 FPH @ 38 FPH) WOB 8, RPM 120, SPM 65

UTAH DIVISION OF OIL, GAS AND MINING

NOTICE OF REPORTING PROBLEMS

Operator: Questar Exploration & Production Co Account: N5085 Today's Date: 10/23/2008

Problems:

- Late Report(s)
- Inaccurate Report(s)
- Incomplete Report(s)
- Other: _____

Failure to submit reports in a timely, accurate, and complete manner may 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.

To avoid compliance action, these reporting problems should be resolved within 7 days.

Send reports to:

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

Fax to:

(801) 359-3940

43-047-39044
23 Es 21e
WV 7BD-23-8-21

Type of Report	Month(s) of Problem Report		
<input type="checkbox"/> Production – Form 10 <input type="checkbox"/> Disposition – Form 11 <input type="checkbox"/> Gas Plant – Form 13 <input type="checkbox"/> Enhanced Recovery – UIC Form 2 <input type="checkbox"/> Injection – UIC Form 3 <input type="checkbox"/> Other _____			
Type of Report	Well Name(s)	API Number(s)	Drilling Commenced
<input type="checkbox"/> Spud Notice – Form 9 <input checked="" type="checkbox"/> Drilling Reports – Form 9 <input type="checkbox"/> Well Completion Report – Form 8 <input type="checkbox"/> Other _____	<input checked="" type="checkbox"/> List Attached		

Description of Problem:

Per R649-3-6 2.4 The operator shall submit a monthly status report for each drilling well on Form 9, Sundry Notice and Reports on Wells. The report should include the well depth and a description of the operations conducted on the well during the month.

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

cc: Compliance File
RAM
Well File
CHD

43-047-39044

CONFIDENTIAL

Operations Summary Report - DRILLING

Well Name: WV 7BD-23-8-21
Location: 23-8-S 21-E 26
Rig Name: SST

Spud Date: 4/12/2008
Rig Release: 7/27/2008
Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
4/12/2008	06:00 - 18:00	12.00	DRL	1	DRLG & SET 90' OF 20" CONDUCTOR & 85 MOUSEHOLE, BLM -STAE NOTIFIED OF SPUD ON 4/12/2008, DRLG TO 554' FT & SET 537' FT OF 13 3/8", 54.5 # K-55 SURFACE CASING
4/30/2008	06:00 - 18:00	12.00	LOC	4	RIG DOWN ON THE NBE-4DD, RIG DOWN VFD HOUSE, 1 MOTOR, DOGHOUSES, DRAWWORKS, MUD TANKS., MOVE MUD PRODUCTS OFF LOC. MOVE AND SET RIG CAMPS ON NEW LOC. MOVE FUEL TANK AND PARTS HOUSE TO NEW LOC. 40% RIGGED DOWN 10% MOVED 10% RIGGED UP
5/1/2008	18:00 - 06:00	12.00	LOC	4	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RIG DOWN ON NBE 4DD & MOVE TO WV 7 BD, SUB BASES, MOTORS, PUMPS, SPLIT DERRICK, MUD TANKS, GAS BUSTER - MOVE 10 LOADS TO NEW LOCATION 95% RIGGED DOWN 35% MOVED 10% RIGGED UP
5/2/2008	18:00 - 06:00	12.00	LOC	4	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RIG DOWN ON NBE 4DD & MOVE TO WV 7BD, R/D BOPS, MATTING BOARDS - MOVE SUB BASES, PUMPS, DERICK, MATTING BOARDS, BOP'S, MOTORS 100% RIGGED DOWN 75% MOVED 10% RIGGED UP
5/3/2008	18:00 - 06:00	12.00	LOC	4	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RIGGING UP, LAY PLASTIC, SET MATTING BOARDS, SUB BASES, SET BOP'S, PUMPS, MUD TANKS, PUT DERRICK TOGETHER, 10 LOADS LEFT ON OLD LOCATION 100% RIGGED DOWN 90% MOVED 45% RIGGED UP
5/4/2008	18:00 - 06:00	12.00	LOC	4	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RIG UP, SET SUB BASE SPREADER BEAMS, ROTARY TABLE, DRILLERS DOG HOUSE, MOTORS, PER-MIX TANK, SET DERRICK ON FLOOR 100% RIGGED DOWN 100% MOVED 70% RIGGED UP
5/5/2008	18:00 -		LOC	4	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RAISE A-LEGS, STRING UP BLOCKS, SET MUD CLEANING EQUIPMENT & BAR HOPPERS, KEEP ONE BED TRUCK FOR TOP DRIVE & CAT WALK - RELEASE REST OF TRUCKS & CRANE, DRAWWORKS HYDRULIC BRAKE LOCKED PLC IN VFD HOUSE WILL NOT LET IT RELEASE - TECH COMING TOMORROW TO CHECK OUT 100% RIGGED DOWN 100% MOVED 90% RIGGED UP
5/6/2008	18:00 - 06:00	12.00	LOC	4	WAIT ON DAYLIGHT
	06:00 - 18:00	12.00	LOC	4	RIG UP RIG & EQUIPMENT, RIG UP GAS BUSTER LINE, FLARE LINES, MUD LINES, PLUG IN ELETRIC LINES, CHANGE PUMP LINERS & SWABS
5/7/2008	18:00 - 06:00	12.00	LOC	4	RIG UP, DERRICK INSPECTION, S/M, RAISE DERRICK - UP @ 20:00 HRS, BRIDLE DOWN, RIG UP FLOOR
	06:00 - 18:00	12.00	LOC	4	IDM TECH COMMING TODAY TO CHECK OUT VFD HOUSE RIG UP FLOWLINE, P/U TOP DRIVE, SET PRAGMA CAT WALK, CEMENT CELLAR IDM TECH TROUBLE SHOOTING PROBLEM IN VFD HOUSE

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
5/7/2008	18:00 - 06:00	12.00	LOC	4	FINISH RIG UP TOP DRIVE AND PRAGMA, HAMMER UP BOPE, MOUNT ROTARY HEAD AND SPOOL,
5/8/2008	06:00 - 11:00	5.00	BOP	1	W/O/BUSS F/RECTIFIER F/VFD HOUSE, NIPPLE UP BOPE
	11:00 - 13:00	2.00	BOP	2	TEST UPPER & LOWER VALVES ON TOP DRIVE, FLOOR VALVES
	13:00 - 16:00	3.00	WOT	4	WAIT ON TEST PLUG
	16:00 - 18:00	2.00	WOT	4	RIG DOWN TESTERS AND WAIT ON REPLACEMENT TESTER
	18:00 - 01:00	7.00	BOP	2	FINISH TESTING BOPS, TEST BLIND, PIPES, FLOOR VALVES, UPPER & LOWER CONTROL VALVES ON TOP DRIVE, CHOKE MANIFOLD TO 5000 PSI FOR 10 MIN. AND 250 PSI FOR 5 MIN. ANNULAR TO 3500 PSI FOR HIGH AND 250 PSI FOR LOW, CASING TO 1500 PSI FOR 30 MIN. KOOMEY FUNCTION TEST, ALL EQUIPMENT TESTED GOOD.
5/9/2008	01:00 - 01:30	0.50	DEQ	4	SET WEAR BUSHING
	01:30 - 06:00	4.50	RIG	2	RIG REPAIR, WAIT ON BUSS FOR RECTIFIER
	06:00 - 01:30	19.50	RIG	2	RIG REPAIR, WAIT ON BUSS FOR RECTIFIER
5/10/2008	01:30 - 02:00	0.50	RIG	7	PRE SPUD INSPECTION & SAFETY MEETING
	02:00 - 06:00	4.00	TRP	1	P/U 12 1/4 BHA
	06:00 - 08:00	2.00	TRP	1	P/U 12 1/4 BHA
	08:00 - 11:00	3.00	DRL	4	DRLG OUT FLOAT EQUIPMENT, POCKET & 10 FT NEW HOLE F/554 TO 564 FT
	11:00 - 12:00	1.00	EQT	2	FIT TO EMW OF 10.5 PPG, 61 PSI, MUD WT 8.4
	12:00 - 16:00	4.00	DRL	1	DRLG F/564 TO 845 FT.
	16:00 - 16:30	0.50	RIG	1	RIG SERVICE
	16:30 - 19:00	2.50	DRL	1	DRLG F/ 845' TO 972 FT.
	19:00 - 19:30	0.50	OTH		LAY DOWN WASHED JT. SHWDP (BOX END)
	19:30 - 20:30	1.00	DRL	1	DRLG F/ 972' TO 1030 FT. (WOB 8/10, RPM 45, SPM 100 X 100, PSI 2400)
	20:30 - 21:00	0.50	SUR	1	WIRELINE SURVEY AT 945'
	21:00 - 21:30	0.50	RIG	2	# 3 ENGINE WENT DOWN, BLACKED RIG OUT
	21:30 - 06:00	8.50	DRL	1	DRLG F/ 1030' TO 1320 FT. (WOB 8/10, RPM 50, SPM 105X105, PSI 2675)
5/11/2008	06:00 - 07:00	1.00	DRL	1	DRLG F/1320 TO 1374 (54 FT 54 FPH) WOB 8-12 RPM 138, GPM 880
	07:00 - 07:30	0.50	RIG	2	RIG REPAIR TOP DRIVE ROTARY, LOOSE CABLE CONNECTION IN DERRICK
	07:30 - 11:00	3.50	DRL	1	DRLG F/1374 TO 1550 (176 FT 50.28 FPH) WOB 8-20 RPM 158, GPM 880
	11:00 - 11:30	0.50	SUR	1	SURVEY @1465 .7 DEG AZ 225.8 TVD 1464.95
	11:30 - 12:00	0.50	RIG	4	INSTALL STRIPPING RUBBER
	12:00 - 15:00	3.00	RIG	2	RIG REPAIR POWER LOSS & FIX LEAK IN STANDPIPE UNION
	15:00 - 22:00	7.00	DRL	1	DRLG F/1550 TO 1920 FT. (370 FT. 52.8 FPH) WOB 8/18, RPM 149, SPM 105X85 AT 796 GPM
	22:00 - 23:00	1.00	RIG	2	CHANGE OUT SWAB & LINER #1 PUMP
	23:00 - 01:30	2.50	DRL	1	DRLG F/ 1920' TO 2091 FT. (171 FT. 68.4FPH) WOB 8/18, RPM 151, SPM 95X95 AT 796 GPM
	01:30 - 02:00	0.50	SUR	1	WIRELINE SURVEY AT 2006 FT.
5/12/2008	02:00 - 06:00	4.00	DRL	1	DRLG F/ 2091' TO 2300 FT. (209 FT. 52.25 FPH) WOB 8/18, RPM 150, SPM 90X90 AT 754 GPM
	06:00 - 14:30	8.50	DRL	1	DRLG F/2300 TO 2567 (267 FT 31.41 FPH) WOB 12-25, RPM 115-150, GPM 754
	14:30 - 15:00	0.50	RIG	1	RIG SERVICE
	15:00 - 16:30	1.50	DRL	1	DRLG F/2567 TO 2581 (14 FT 9.33 FPH)
	16:30 - 17:00	0.50	CIRC	1	CIR & MIX SLUG
	17:00 - 18:00	1.00	SUR	1	DROP SURVEY, & PUMP DRY JOB
	18:00 - 19:30	1.50	TRP	10	TOH TO SHOE
	19:30 - 22:00	2.50	RIG	2	REPROGRAM #3 ENGINE AND GET ON LINE
	22:00 - 00:00	2.00	TRP	10	FINISH TRIP OUT WITH BIT #1
	00:00 - 01:30	1.50	TRP	2	TRIP TO CSG SHOE WITH BIT #2
	01:30 - 02:00	0.50	RIG	2	FILL PIPE & LOAD TEST ENGINE'S
	02:00 - 03:30	1.50	TRP	2	CONTINUE TRIP IN
	03:30 - 06:00	2.50	DRL	1	DRLG. F/ 2581' TO 2663 FT (82 FT. 32.8 FPH) WOB 15, RPM 70, SPM 105X105, PSI

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
5/12/2008	03:30 - 06:00	2.50	DRL	1	3100 AT 880 GPM
5/13/2008	06:00 - 14:00	8.00	DRL	1	DRLG. 2663' TO 2758 FT. (95 FT @ 11.8 FPH) WOB 12-15,RPM 158,SPM 105X105,880 GPM
	14:00 - 14:30	0.50	RIG	1	RIG SERVICE
	14:30 - 06:00	15.50	DRL	1	DRLG. 2758' TO 2912 FT. (154 FT @ 9.9 FPH) WOB 12-15,RPM 158,SPM 105X105,880 GPM
5/14/2008	06:00 - 06:30	0.50	DRL	1	DRLG F/2912 TO 2924
	06:30 - 07:00	0.50	CIRC	1	CIR & MIX TRIP SLUG
	07:00 - 07:30	0.50	SUR	1	DROP SURVEY
	07:30 - 11:00	3.50	TRP	10	TOH F/BIT #3
	11:00 - 13:00	2.00	TRP	1	CHANGE OUT BITS & MOTORS
	13:00 - 16:00	3.00	TRP	2	TIH TO 2886 FT.
	16:00 - 16:30	0.50	REAM	1	WASH FROM 2886' TO 2924' (38 FT) TO BOTTOM
	16:30 - 06:00	13.50	DRL	1	DRLG. F/ 2924' TO 3070 FT. (146' AT 10.8 FPH) WOB 15/20,RPM 162,SPM 105X105 AT 3125 PSI AT 880 GPM
5/15/2008	06:00 - 14:00	8.00	DRL	1	DRLG. 3070' TO 3140 FT. (70' @ 8.75 FPH)WOB 12/17,RPM 167,SPM 110X110 AT 2950 PSI AT 922 GPM
	14:00 - 14:30	0.50	RIG	1	RIG SERVICE
	14:30 - 06:00	15.50	DRL	1	DRLG. 3140 FT. 3290 FT.@ 9.6 FPH) WOB 12/16,RPM 167,SPM 110X110 AT 3050 PSI AT 922 GPM
5/16/2008	06:00 - 09:30	3.50	DRL	1	DRLG F/3290 TO 3331 (41 FT 11.71 FPH) WOB 14-20 GMP 921 RPM 167
	09:30 - 10:00	0.50	RIG	1	RIG SERVICE
	10:00 - 13:30	3.50	DRL	1	DRLG F/3331 TO 3382 (51 FT 14.57 FPH) WOB 14-20 GMP 921 RPM 167
	13:30 - 15:30	2.00	RIG	2	RIG REPAIR MUD PUMPS, CHANGE OUT 2 VALVE SEATS
	15:30 - 18:30	3.00	DRL	1	DRLG F/3382 TO 3425 (43 FT 14.33 FPH) WOB 14-20 GMP 921 RPM 167, HIGH TORQUE 4400 TO 10700
	18:30 - 19:00	0.50	CIRC	1	CIR BTM'S UP
	19:00 - 19:30	0.50	SUR	1	FLOW CHECK & DROP SURVEY
	19:30 - 22:00	2.50	TRP	2	TOH
	22:00 - 00:30	2.50	TRP	1	CHANGE OUT MUD MTRS & BITS,LAY DOWN IBS
	00:30 - 01:00	0.50	TRP	2	TRIP IN TO CSG. SHOE
	01:00 - 01:30	0.50	OTH		CHANGE SAVER SUB & CORR. RING.
	01:30 - 02:30	1.00	RIG	2	CHANGE OUT LINK TILT CYLINDER
	02:30 - 04:30	2.00	TRP	2	TIH
	04:30 - 05:00	0.50	REAM	1	WASH & REAM 94 FT TO BTM
	05:00 - 06:00	1.00	DRL	1	DRLG F/3425 TO 3455
5/17/2008	06:00 - 07:00	1.00	DRL	1	DRLG F/3455 TO 3515 (60 FT 60 FPH) WOB 12-15, RPM 166, GPM 880, 1/2 TRONA WATER FLOW
	07:00 - 07:30	0.50	RIG	1	RIG SERVICE
	07:30 - 14:00	6.50	DRL	1	DRLG F/3515 TO 3734 (219 FT 33.6 FPH) WOB 12-15, RPM 162, GPM 838, 1/2 TRONA WATER FLOW
	14:00 - 14:30	0.50	RIG	2	PUMP REPAIR,CHANGE SWAP #2 PUMP
	14:30 - 23:30	9.00	DRL	1	DRLG F/ 3734' TO 3994' (259 FT. @ 28.7 FPH) WOB 12-15,RPM 160, GPM 838,SPM 100X100 AT 3300 PSI
	23:30 - 00:30	1.00	SUR	1	CIRCULATE CLEAN HOLE & RUN WIRELINE SURVEY AT 3909 FT. HAD 11/2" WATER FLOW
	00:30 - 04:00	3.50	DRL	1	DRLG F/ 3994' TO 4089 (95 FT.@ 27.0 FPH) WOB 12-15,RPM 160,GPM 838,SPM 100X100 AT 3300 PSI
	04:00 - 05:00	1.00	RIG	2	CHANGE SWAB #2 PUMP,TIGHTEN CLAMP ON SAVER SUB
	05:00 - 06:00	1.00	DRL	1	DRLG 4089' TO 4119 FT (25 FT.@ 25 FPH) WOB 12-15,RPM 160,GPM 880,SPM 100X100 AT 3300 PSI
5/18/2008	06:00 - 12:00	6.00	DRL	1	DRLG F/4119 TO 4293 (174 FT AT 29.0 FPH) WOB 12-15,RPM 160,SPM 100X100,838 GPM AT 3300 PSI, TRONA FLOW 1"

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations	
5/18/2008	12:00 - 12:30	0.50	RIG	1	RIG SERVICE	
	12:30 - 19:00	6.50	DRL	1	DRLG F/4293 TO 4533 (240 FT AT 36.92 FPH) WOB 14-18,RPM 160,SPM 100X100,838 GPM AT 3300 PSI, TRONA FLOW 1/4", RAISE MUD WT TO 9.2 PPG	
	19:00 - 20:00	1.00	CIRC	1	CIR LCM SWEEP	
	20:00 - 22:00	2.00	TRP	14	FLOW CHECK, SHORT TRIP 20 STD	
	22:00 - 00:30	2.50	CIRC	1	CIR 2 LCM SWEEPS, FLOW CHECK	
	00:30 - 01:00	0.50	SUR	1	FLOW CHECK - DROP SURVEY	
	01:00 - 05:00	4.00	TRP	2	TRIP OUT TO RUN 9 5/8" CASING, SLM 2.5 FT DIFFERENCE	
	05:00 - 06:00	1.00	TRP	1	L/D 12 1/4 BHA	
	5/19/2008	06:00 - 07:30	1.50	OTH		PULL WEAR BUSHING
		07:30 - 11:00	3.50	CSG	1	R/U CASING CREW & SAFETY MEETING
11:00 - 14:00		3.00	WOT	4	M/U FLOAT, CASING TONGS UNABLE TO TORQUE CONNECTION, W/O/HIGH TORQUE TONGS	
14:00 - 17:00		3.00	CSG	2	RUN 9 5/8 CASING TO 1699 FT	
17:00 - 18:30		1.50	CSG	2	REMOVE 2 BROKEN CENTRILIZER HUNG UP ON DRILLING NIPPLE	
18:30 - 20:30		2.00	CSG	2	RUN 9 5/8 CASING TO 2668 FT	
20:30 - 21:00		0.50	CSG	2	CHANGE OUT CASING TONGS	
21:00 - 00:00		3.00	CSG	2	FINISH RUNING CASING TO 4490 FT.	
00:00 - 02:30		2.50	CIRC	1	CIRC & CONDITION HOLE	
02:30 - 03:30		1.00	CSG	2	LAND CASING AT 4517.9 FT. WITH 220,000 STRING WT. AND TIGHTEN DOWN LOCK DOWN PINS	
5/20/2008	03:30 - 06:00	2.50	CMT	1	S/M & RIG UP HALLIBURTON & L/D FILL TOOL	
	06:00 - 06:30	0.50	CMT	2	HOLD SAFETY MTG WITH CEMENTERS AND INSTALL CMT.HEAD & LOAD PLUG	
	06:30 - 10:30	4.00	CMT	2	CEMENT 9 5/8" HCP110 (SLIJ) BUMP PLUG-CHECK FLOATS HELD,GOT 175 BBL'S CMT TO SURFACE	
	10:30 - 11:00	0.50	EQT	1	PRESSURE TEST CASING TO 1500 PSI AT 30 MIN.	
	11:00 - 11:30	0.50	CMT	1	RIG DOWN HALLIBURTON	
	11:30 - 14:00	2.50	BOP	1	NIPPLE DOWN BOP	
	14:00 - 16:00	2.00	BOP	1	INSTALL BOP CRADLE AND P/U STACK	
	16:00 - 16:30	0.50	CSG	6	CUT OFF CASING	
	16:30 - 18:00	1.50	BOP	1	NIPPLE DOWN BOPE	
	18:00 - 23:00	5.00	WHD	1	NIPPLE UP B SECTION & TEST TO 5000 PSI / 15 MIN.	
5/21/2008	23:00 - 06:00	7.00	BOP	1	NIPPLE UP BOPE	
	06:00 - 11:00	5.00	BOP	1	N/U 11" BOP'S & HYDRULIC LINES,FUNCTION TEST	
	11:00 - 17:00	6.00	BOP	2	R/U B&C QUICK TEST,TEST UPPER & LOWER TOP DRIVE VALVES,ALL FLOOR VALVES, PIPE RAMS,BLIND RAMS,MANUEL CHOKE & KILL VALVES,HCR,CHOKE MANIFOLD TO 10000 PSI F/10 MIN & 250 PSI F/5 MIN,ANNULAR TO 5000 PSI F/10 MIN & 250 PSI F/5 MIN,MUD LINE TO 3500 PSI,KOOMEY FUNCTION TEST	
	17:00 - 18:00	1.00	BOP	1	N/U FLOWLINE	
	18:00 - 18:30	0.50	BOP	1	INSTALL WEAR BUSHING	
	18:30 - 20:00	1.50	TRP	1	STRAP & CALIPER BHA,P/U BHA	
	20:00 - 23:00	3.00	TRP	2	TIH HOLE TO 4396	
	23:00 - 00:00	1.00	RIG	6	SLIP & CUT 99' DRILLING LINE	
	00:00 - 02:30	2.50	DRL	4	DRLG CEMENT & FLOAT EQUIP,FC @ 4425-SHOE @ 4418	
	02:30 - 03:00	0.50	DRL	1	DRLG F/4533 TO 4543	
5/22/2008	03:00 - 03:30	0.50	CIRC	1	CIR BTMS UP	
	03:30 - 04:00	0.50	EQT	2	FIT TEST W/9.1 PPG MUD & 1039 PSI = 13.5 PPG EQUIV	
	04:00 - 06:00	2.00	DRL	1	DRLG F/4543 TO 4652 (109 FT @ 54.5 FPH) WOB 8/12,GPM 545,RPM 50	
	06:00 - 09:30	3.50	DRL	1	DRLG F/4652 TO 4782 (130 FT @ 37.1 FPH) WOB 8-12,GPM 545,RPM 157-50	
	09:30 - 10:30	1.00	SUR	1	CIR BTM & SURVEY @ 4697,INC 1.0°,AZ 145.0,TVD 4696.73	
	10:30 - 18:30	8.00	DRL	1	DRLG F/ 4782 TO 5068 (286 FT @ 35.7 FPH) WOB 8-18,GPM 545,RPM 157-50	

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
5/22/2008	18:30 - 19:00	0.50	RIG	1	SERVICE RIG & TOP DRIVE
	19:00 - 01:30	6.50	DRL	1	DRLG F/5068 TO 5259 (191 FT @ 29.3 FPH) WOB 10-20,GPM 545,RPM 157-50, WATER FLOW OF 10 BBL/HR @ 5200 FT-OIL WITH IT CAUSING HIGH BACKGROUND GAS OF 4400 UNITS
5/23/2008	01:30 - 02:30	1.00	SUR	1	CIR & SURVEY - MISRUN
	02:30 - 06:00	3.50	DRL	1	DRLG F/5259 TO 5355 (96 FT @ 27.4 FPH) WOB 15-18,GPM 545,RPM 157-50
5/23/2008	06:00 - 07:30	1.50	SUR	1	CIR & SURVEY @ 5270 FT,INC 1.7',AZ 140.80,TVD 5269.57
	07:30 - 15:00	7.50	DRL	1	DRLG F/5355 TO 5450 (95 FT @ 12.6 FPH) WOB 12-20,GPM 545-600,RPM 200-235, PUMPING SWEEPS FOR BIT BALLING-RAISING MUD WT TO 9.7 FOR WATER FLOW
5/24/2008	15:00 - 15:30	0.50	RIG	1	SERVICE RIG & TOP DRIVE
	15:30 - 18:00	2.50	DRL	1	DRLG F/5450 TO 5470 (20 FT @ 8 FPH) WOB 12-20,GPM 600,RPM 218, PUMPING SWEEPS FOR BIT BALLING-RAISING MUD WT TO 9.8 FOR WATER FLOW
5/24/2008	18:00 - 18:30	0.50	OTH		FLOW CHECK, FLOWING @ 2 BB/HR
	18:30 - 19:00	0.50	CIRC	1	CIR BTM'S UP,SPOT 42 BBL 11.8 PPG HEAVY PILL
5/24/2008	19:00 - 19:30	0.50	TRP	10	TOH TO SHOE,PULL SLOW DUE TO SWABING
	19:30 - 20:00	0.50	OTH		FLOW CHECK, FLOWING @ 3 BBL/HR
5/24/2008	20:00 - 20:30	0.50	TRP	10	TIH TO 5470
	20:30 - 00:00	3.50	CIRC	1	CIR OUT WATER & GAS, 10 FT FLARE WITH 7262 UNITS GAS,RAISE MUD WT TO 10.1 PPG
5/24/2008	00:00 - 00:30	0.50	OTH		FLOW CHWCK-FLOWING 1 @ BBL/HR
	00:30 - 02:30	2.00	CIRC	1	CIR,MIX & SPOT 100 BBLS 12.1 PPG HEAVY PILL
5/24/2008	02:30 - 06:00	3.50	TRP	1	TOH FOR BIT TO 2700
	06:00 - 07:30	1.50	TRP	10	TOH FOR BIT
5/24/2008	07:30 - 09:30	2.00	TRP	10	M/U BIT & TIH 1440,FILL AT BHA
	09:30 - 10:00	0.50	RIG	1	RIG SERVICE,HYDRULIC LEAK ON TOP DRIVE
5/24/2008	10:00 - 15:30	5.50	RIG	2	RIG REPAIR,LEAK IN HYDRULIC RETURN LINE,INSTALL NEW LINE & TEST TOP DRIVE
	15:30 - 18:30	3.00	TRP	10	TIH F/1440 TO 5355
5/25/2008	18:30 - 19:00	0.50	REAM	1	SAFETY WASH F/5355 TO 5470-NO FILL
	19:00 - 06:00	11.00	DRL	1	DRLG F/5470 TO 5517 (47 FT @ 4.2 FPH) WOB 10-25,GPM 500-585,RPM 184-228
5/25/2008	06:00 - 06:30	0.50	TRP	10	FLOW CHECK-FLOWING @ 1 BBL/HR
	06:30 - 09:00	2.50	CIRC	1	CIR,MIX & PUMP 100 BBLS 12.6 PPG HEAVY PILL
5/25/2008	09:00 - 14:00	5.00	TRP	10	TOH FOR BIT,L/D BIT ,MOTOR,STAB, BIT RINGED OUT IN 11 HRS
	14:00 - 15:00	1.00	RIG	1	SERVICE RIG & TOP DRIVE,CHANGE CORROSION RING
5/25/2008	15:00 - 19:30	4.50	TRP	10	M/U BIT & MOTOR,TIH TO 5355,BREAK CIR @ 1500
	19:30 - 20:30	1.00	REAM	1	WASH F/5355 TO 5517-NO FILL. FAN BOTTOM AND BREAK IN BIT
5/26/2008	20:30 - 06:00	9.50	DRL	1	DRLG F/5517 TO 5638', WOB 30, RPM 162, GPM 460 (121' AT 12.7 FT/HR).
	06:00 - 16:00	10.00	DRL	1	DRLG F/5638 TO 5725 (87 FT @ 8.7 FPH) WOB 28-35,RPM 166-188,GPM 440-460
5/26/2008	16:00 - 16:30	0.50	SUR	1	DROP SURVEY,FLOW CHECK-FLOWING 1 BBL/HR
	16:30 - 17:00	0.50	CIRC	1	CIR OUT GAS, 5530 UNITS-NO FLARE
5/26/2008	17:00 - 17:30	0.50	TRP	10	TOH F/5725' TO 5256'.
	17:30 - 18:30	1.00	CIRC	1	CIR OUT GAS & SPOT 100 BBL OF 12.7 PPG HEAVY PILL-5555 UNITS GAS WITH NO FLARE.
5/26/2008	18:30 - 23:00	4.50	TRP	10	TOH FOR BIT #7. PUMP DRY PIPE SLUG AND PULL ROTATING HEAD.
	23:00 - 03:30	4.50	TRP	10	M/U BIT & TIH TO 4500
5/26/2008	03:30 - 04:30	1.00	CIRC	1	FILL PIPE & CIR OUT HEAVY PILL,3130 UNITS GAS WITH 5 FT FLARE
	04:30 - 05:00	0.50	TRP	10	TIH TO 5543
5/27/2008	05:00 - 06:00	1.00	REAM	1	WASH F/5543 TO 5725
	06:00 - 15:00	9.00	DRL	1	DRLG 8.5" HOLE F/5725 TO 5922 (197 FT @ 21.8 FPH) WOB 6-14,RPM

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
5/27/2008	06:00 - 15:00	9.00	DRL	1	162-206,GPM 400-545,RATTY DRILLING-BOUNCING & TORQUE
	15:00 - 15:30	0.50	RIG	1	SERVICE RIG & TOP DRIVE
	15:30 - 18:00	2.50	DRL	1	DRLG F/5922 TO 5996'. WOB 8/13, RPM MM 117, ROTARY 50/60, PUMP 420 GPM, PSI 1880 WASATCH @ 5925
	18:00 - 04:00	10.00	DRL	1	DRILL FROM 5996' TO 6302'. WOB 9/12, ROTARY 45, MUD MOTOR 117, PSI 1650, GPM 420.
	04:00 - 05:00	1.00	SUR	1	CIR & WIRE LINE SURVEY AT 6217'. INC
	05:00 - 06:00	1.00	DRL	1	DRLG F/6302 TO 6334
5/28/2008	06:00 - 17:00	11.00	DRL	1	DRLG F/6334 TO 6586, (252 FT @ 22.9 FPH) WOB 8-14,RPM 157-188,GPM 420-460,BIT BALLING & BOUNCING
	17:00 - 17:30	0.50	RIG	1	SERVICE RIG & TOP DRIVE
5/29/2008	17:30 - 00:00	6.50	DRL	1	DRLG F/6586 TO 6777, (191 FT @ 29.3 FPH) WOB 8-14, GPM 420-460, BIT BALLING
	00:00 - 01:00	1.00	CIRC	1	CIRC. OUT SWEEP
	01:00 - 01:30	0.50	SUR	1	RUN WIRELINE SURVEY
	01:30 - 06:00	4.50	DRL	1	DRLG F/ 6777 TO 6872 , (95 FT. @ 21.1 FPH) WOB 8-14, GPM 420-460,
	06:00 - 12:30	6.50	DRL	1	DRLG F/6872 TO 7063 (191 FT @ 29.3 FPH) WOB 8-15,RPM 169-179,GPM 460
	12:30 - 13:00	0.50	RIG	1	SERVICE RIG & TOP DRIVE
	13:00 - 22:00	9.00	DRL	1	DRLG F/7063 TO 7212 (149 FT @ 16.4 FPH) WOB 8-15, RPM 169-179, GPM 460
	22:00 - 00:00	2.00	CIRC	2	LOST TOTAL RETURNS @ 7212' PUMPED 2 80 BBL. LCM SWEEPS, (REGAINED FULL RETURNS)
	00:00 - 00:30	0.50	DRL	1	DRLG F/ 7212 TO 7216 (LOST RETURNS)
	00:30 - 01:30	1.00	CIRC	2	SPOT 80 BBL LCM SWEEP ON BOTTOM
5/30/2008	01:30 - 02:00	0.50	TRP	2	TRIP OUT OF HOLE 5 STANDS
	02:00 - 06:00	4.00	CIRC	6	CIRC OVER TOP OF HOLE AND BUILD MUD VOLUME W/ 5% LCM IN ACTIVE, LOST 450 BBL MUD
	06:00 - 07:30	1.50	CIRC	1	CIR & BUILD VOLUME W/5% LCM,CIRC OUT 50 BBL WATER
	07:30 - 08:00	0.50	TRP	2	TIH 5 STDS
	08:00 - 20:00	12.00	DRL	1	DRLG F/7216 TO 7439 (223 FT @ 18.5 FPH) WOB 8-18 RPM 167 GPM 460
	20:00 - 21:00	1.00	CIRC	1	PUMP 10 BBL SWEEP & CIRC. OUT F/ SURVEY
5/31/2008	21:00 - 21:30	0.50	SUR	1	WIRE LINE SURVEY @ 7264
	21:30 - 06:00	8.50	DRL	1	DRLG F/ 7439 TO 7500 (61 FT @ 7.1 FPH) WOB 8 -18 RPM 167 RPM, GPM 460
	06:00 - 12:00	6.00	DRL	1	DRLG F/7500 TO 7635 (135 FT @ 22.5 FPH) WOB 9-15,RPM178,GPM 460
	12:00 - 12:30	0.50	RIG	1	SERVICE RIG & TOP DRIVE
	12:30 - 04:30	16.00	DRL	1	DRLG F/7635 TO 7922 (287 FT @ 17.9 FPH) 8-18,RPM165-180,GPM 460
6/1/2008	04:30 - 05:00	0.50	CIRC	1	CIR FOR SURVEY
	05:00 - 06:00	1.00	SUR	1	SURVEY @ 7837, INC 1.5", AZ 139.8, TVD 7835.65
	06:00 - 12:00	6.00	DRL	1	DRLG F/7922 TO 8008 (86 FT @ 14.3 FPH) WOB 12-18,RPM 173,GPM 460
	12:00 - 13:30	1.50	CIRC	1	FLOW CHECK,CIR BTM UP,FLOWING .5 BBL/HR
	13:30 - 14:30	1.00	TRP	10	TOH WET F/8008 TO 7158
	14:30 - 15:00	0.50	CIRC	1	SPOT 75 BBL LCM PILL
	15:00 - 16:00	1.00	TRP	10	TOH TO 5253
	16:00 - 18:00	2.00	CIRC	1	CIR OUT GAS & WATER,SPOT 100 BBL 12.7 HEAVY PILL,6572 UNITS GAS W/6 FT FLARE,20 BBL WATER
	18:00 - 20:30	2.50	TRP	10	TOH F/ 5256 TO 1438, FLOW CHECK, PUMP 20 BBL. SLUG
	20:30 - 02:30	6.00	ISP	1	INSPECT B.H.A. LAYED DOWN 1 JT. HWDP,(UNDER SIZED TOOLJOINT 5 7/8") P/U 1 JT. TO REPLACE
6/2/2008	02:30 - 06:00	3.50	TRP	2	SWAP OUT MTRS. AND TIH W/ BIT #9
	06:00 - 06:30	0.50	TRP	10	TIH TO 3000 FT
	06:30 - 07:00	0.50	OTH		CHANGE OUT & INSTALL ROTATING HEAD
	07:00 - 08:00	1.00	TRP	10	TIH TO 4500
	08:00 - 09:00	1.00	RIG	6	SLIP & CUT 108 FT DRILLING LINE
	09:00 - 09:30	0.50	RIG	1	SERVICE RIG,ALIGN TOP DRIVE TRACK

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations	
6/2/2008	09:30 - 10:00	0.50	TRP	10	TIH TO 5100	
	10:00 - 10:30	0.50	CIRC	1	CIR OUT HEAVY PILL,5310 UNITS GAS WITH 25 FT FLARE	
	10:30 - 12:30	2.00	TRP	10	TIH TO 7922	
	12:30 - 13:00	0.50	REAM	1	WASH F/7922 TO 8008,15 FT FILL	
6/3/2008	13:00 - 06:00	17.00	DRL	1	DRLG F/8008 TO 8290 (282 FT @ 16.5 FPH) 8-12 WOB, GPM 457, RPM 155	
	06:00 - 11:30	5.50	DRL	1	DRLG F/8290 TO 8405 (115 FT @ 20.9 FPH) WOB 8-14,RPM 150-165,GPM 482	
	11:30 - 12:00	0.50	RIG	1	SERVICE RIG & TOP DRIVE	
	12:00 - 15:30	3.50	DRL	1	DRLG F/8405 TO 8465 (60 FT @ 17.1 FPH) WOB 9-15,RPM 150-165,GPM 482	
	15:30 - 17:00	1.50	CIRC	1	CIR AT REDUCED RATE & MIX LCM,LOST 100 BBL MUD	
	17:00 - 19:30	2.50	DRL	1	DRLG F/8465 TO 8499 (34 FT @ 13.6 FPH) WOB 8 - 14, RPM 150-165, GPM 482	
	19:30 - 21:00	1.50	SUR	1	PUMP SWEEP & SURVEY @ 8414' (INC. 1.6 AZ. 153.70 , TVD 8412.44	
6/4/2008	21:00 - 06:00	9.00	DRL	1	DRLG F/ 8499 TO 8670 (171 ft @ 19 FPH) WOB 8-15, RPM 150-160, GPM 482	
	06:00 - 13:30	7.50	DRL	1	DRLG F/8670 TO 8786 (116 FT @ 15.4 FPH) WOB 8-16,RPM 140-170,GPM 440-482	
	13:30 - 14:30	1.00	RIG	1	SERVICE RIG & TOP DRIVE,CHANGE THROW AWAY SUB	
	14:30 - 06:00	15.50	DRL	1	DRLG F/8786 TO 9060 (274 FT @ 17.6 FPH) WOB 10-14,RPM 175,GPM 482,TOP OF MESAVERDE @ 8839	
6/5/2008	06:00 - 06:30	0.50	DRL	1	DRLG. F/9060' TO 9073' (13 FT. @ 26 FPH)WOB 20,RPM 153,SPM 100,2100 PSI @ 407 GPM	
	06:30 - 07:30	1.00	CIRC	1	CIRC. & SWEEP HOLE FOR SURVEY	
	07:30 - 08:30	1.00	SUR	1	RUN WIRELINE SURVEY AT 9073 FT.	
	08:30 - 13:00	4.50	DRL	1	DRLG. F/ 9073' TO 9169' (96 FT. @ 21.3 FPH) WOB 20,RPM 153,SPM 100,2100 PSI @ 407 GPM	
	13:00 - 13:30	0.50	RIG	1	RIG SERVICE	
6/6/2008	13:30 - 06:00	16.50	DRL	1	DRLG. F/ 9169' TO 9525' (356 FT. @ 21.57 FPH) WOB 20,RPM 153,SPM 100,2100 PSI @ 407 GPM,NO LOSS'S AND MAINTAINING 6% LCM WITH OIL SHOWS AT SHAKER.	
	06:00 - 15:30	9.50	DRL	1	DRLG. F/ 9525' TO 9741' (216 FT. @ 22.73 FPH) WOB 15/22,RPM 155,SPM 100,PSI 2250,440 GPM	
	15:30 - 16:00	0.50	RIG	1	RIG SERVICE	
	16:00 - 20:30	4.50	DRL	1	DRLG. F/ 9741' TO 9785' (44 FT. @ 9.77 FPH) WOB 10/20,RPM 155,SPM 110,PSI 2250,461 GPM	
	20:30 - 21:30	1.00	CIRC	1	CIRC BTMS UP AND FLOW CHECK	
	21:30 - 22:00	0.50	SUR	1	DROP SURVEY	
	22:00 - 01:30	3.50	TRP	10	TRIP OUT TO 5200 FT.	
	01:30 - 02:30	1.00	CIRC	1	CIRC. BTMS UP AND SPOT HEAVY PILL	
	02:30 - 03:00	0.50	TRP	10	TRIP TO CASING SHOE	
	03:00 - 03:30	0.50	OTH		PULL ROTATING HEAD	
6/7/2008	03:30 - 06:00	2.50	TRP	10	TRIP OUT FOR BIT	
	06:00 - 07:00	1.00	TRP	10	TOH F/BIT	
	07:00 - 08:00	1.00	TRP	1	CHANGE OUT MOTORS & BITS	
	08:00 - 12:00	4.00	TRP	2	TIH TO 5200 FT	
	12:00 - 13:00	1.00	CIRC	1	CIRC OUT HEAVY PILL	
	13:00 - 15:30	2.50	TRP	2	TIH W/BIT#10 TO 9645'	
	15:30 - 16:00	0.50	REAM	1	WASH & REAM FROM 9645' TO 9785' (140 FT. 10 FILL)	
	16:00 - 17:00	1.00	CIRC	1	CIRC BTM'S UP AT 9785 FT.	
	17:00 - 01:00	8.00	DRL	1	DRLG. F/ 9785' TO 10,028' (243 FT. @ 30.37 FPH) WOB 6/12,RPM 132,SPM 120,PSI 2700 AT 503 GPM	
	01:00 - 01:30	0.50	RIG	1	RIG SERVICE	
	01:30 - 05:00	3.50	DRL	1	DRLG. F/ 10,028' TO 10,106' (78 FT. @ 19.5 FPH) WOB 6/12,RPM 132,SPM 120,PSI 2700 AT 482 GPM	
	6/8/2008	05:00 - 06:00	1.00	RIG	2	WORK ON PUMPS
		06:00 - 07:00	1.00	DRL	1	DRLG. F/ 10,106' TO 10,122' (16 FT. @ 16 FPH) WOB 6/12,RPM 130,SPM 115,PSI

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
6/8/2008	06:00 - 07:00	1.00	DRL	1	2700,AT 482 GPM
	07:00 - 09:00	2.00	RIG	2	WORK ON PUMPS
	09:00 - 06:00	21.00	DRL	1	DRLG. F/ 10,122' TO 10,532 (410 FT. @ 18.6 FPH) WOB 6/12,RPM 132,SPM 115,PSI 2600,AT 482
6/9/2008	06:00 - 16:30	10.50	DRL	1	DRLG. F/ 10,532' TO 10,694' (162 FT. @ 15.42 FPH) WOB 14/18,RPM 132,SPM 115,PSI 2560 AT 482 GPM
	16:30 - 17:00	0.50	RIG	1	RIG SERVICE
	17:00 - 06:00	13.00	DRL	1	DRLG. F/ 10,694' TO 10,885' (353 FT. @ 15.02 FPH) WOB 14/18,RPM 132,SPM 115,PSI 2850 AT 482 GPM
6/10/2008	06:00 - 12:30	6.50	DRL	1	DRLG. F/ 10,885' TO 10,981' (96 FT. @ 14.76 FPH) WOB 14/18,RPM 132,SPM 115,PSI 3000 AT 482 GPM
	12:30 - 13:00	0.50	RIG	1	RIG SERVICE
	13:00 - 06:00	17.00	DRL	1	DRLG. F/ 10,981' TO 11,207' (226 FT. @13.29 FPH) WOB 14/18,RPM 132,SPM 115,PSI 3000 AT 482 GPM
6/11/2008	06:00 - 09:30	3.50	DRL	1	DRLG. F/ 11,207' TO 11,267' (60 FT. AT 17.14 FPH) WOB 20,RPM 132,SPM 115,PSI 2850 AT 482 GPM
	09:30 - 10:00	0.50	RIG	1	RIG SERVICE
	10:00 - 16:00	6.00	DRL	1	DRLG. F/ 11,267' TO 11,322' (55 FT. AT 9.16 FPH) WOB 20,RPM 132,SPM 115,PSI 2850 AT 482 GPM
	16:00 - 17:00	1.00	CIRC	1	CIRCULATE BTM'S UP
	17:00 - 17:30	0.50	SUR	1	DROP SURVEY
	17:30 - 18:00	0.50	TRP	2	PULL 8 STD'S TO 10,504'
	18:00 - 20:00	2.00	CIRC	1	CIRC. BTMS UP AND SPOT 150 BBL. HEAVY PILL
	20:00 - 21:00	1.00	CIRC	1	SPOT 150 BBL.HEAVY PILL
	21:00 - 00:00	3.00	TRP	10	TRIP OUT TO 5200 FT.
	00:00 - 01:00	1.00	CIRC	1	CIRCULATE BTM'S UP
	01:00 - 02:30	1.50	CIRC	1	PUMP AND SPOT HEAVY PILL AT 5200 FT.
6/12/2008	02:30 - 06:00	3.50	TRP	10	TRIP OUT FOR BIT # 11
	06:00 - 06:30	0.50	TRP	10	TOH W/BIT # 10
	06:30 - 07:30	1.00	TRP	1	CHANGE OUT BITS & MOTOR
	07:30 - 10:30	3.00	TRP	2	TIH TO 4497 FT
	10:30 - 11:30	1.00	RIG	6	SLIP & CUT DRLG LINE 108 FT
	11:30 - 12:00	0.50	OTH		CHANGE OUT CORRISON RING
	12:00 - 13:30	1.50	TRP	2	TIH TO 6000 FT
	13:30 - 14:00	0.50	CIRC	1	CIR BTM'S UP
	14:00 - 14:30	0.50	TRP	2	TIH TO 6650 FT, HIT BRIDGE
	14:30 - 15:00	0.50	REAM	1	WASH & REAM F/6650 FT TO 6702, LOST RETURNS, TOTAL MUD LOST 800 BBL
	15:00 - 17:00	2.00	REAM	1	BACK REAM F/6702 TO 6663, HOLE PACKED OFF
	17:00 - 17:30	0.50	CIRC	1	SPOT LCM PILL
	17:30 - 18:00	0.50	TRP	2	TOH TO 6250 FT
	18:00 - 01:30	7.50	CIRC	6	BUILD MUD VOLUME
	6/13/2008	01:30 - 03:00	1.50	REAM	1
03:00 - 04:00		1.00	CIRC	1	CIRCULATE BTM'S UP AT 6681'
04:00 - 06:00		2.00	REAM	1	WASH & REAM FROM 6681' TO 6900'
06:00 - 09:30		3.50	REAM	1	WASH & REAM F/7060 TO 7875, LOST RETURNS
09:30 - 11:00		1.50	REAM	1	BACK REAM F/7875 TO 7827
11:00 - 15:30		4.50	CIRC	1	CIR, FULL RETURNS, RAISE LCM TO 6%, CUT MUD WT TO 10.3
15:30 - 16:00		0.50	REAM	1	WASH & REAM F/7827 TO 7931
16:00 - 20:30		4.50	CIRC	1	CIR TWO HI VIS SWEEPS
20:30 - 21:00		0.50	REAM	1	WASH & REAM F/7931 TO 8090
21:00 - 22:00		1.00	TRP	2	TIH TO 9200 FT
22:00 - 00:00	2.00	CIRC	1	CIR OUT HEAVY PILL THROUGH CHOKE, MAX FLARE 45 FT, 85 BBL GAIN	

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations	
6/13/2008	00:00 - 01:00	1.00	TRP	2	TIH TO 10313 FT	
	01:00 - 02:30	1.50	CIRC	1	CIR OUT HEAVY PILL THROUGH CHOKE, MAX FLARE 45 FT, 100 BBL GAIN	
	02:30 - 03:30	1.00	TRP	2	TIH TO 11265 FT	
	03:30 - 05:30	2.00	CIRC	1	CIR BTM'S UP THROUGH CHOKE 50 BBL GAIN, 40 FT FLARE	
	05:30 - 06:00	0.50	REAM	1	WASH & REAM F/11265 TO 11322	
6/14/2008	06:00 - 07:30	1.50	DRL	1	DRLG. F/ 11,322' TO 11,360' (38 FT.@ 25.33 FPH) WOB 6/8,RPM 129,SPM 110 AT 2750 PSI AT 460 GPM	
	07:30 - 08:00	0.50	RIG	1	RIG SERVICE	
	08:00 - 11:00	3.00	DRL	1	DRLG. F/ 11,360' TO 11,365' (5 FT.@ 1.6 FPH) BIT QUIT,TRIED VARIOUS PARAMETERS	
	11:00 - 13:00	2.00	CIRC	1	CIRCULATE AND RAISE VISCOSITY IN ACTIVE SYSTEM	
	13:00 - 14:00	1.00	CIRC	1	PUMP AND SPOT HEAVY ECD PILL	
	14:00 - 16:30	2.50	TRP	2	TRIP OUT TO 8000 FT. (HOLE NOT TAKING FLUID)	
	16:30 - 18:00	1.50	CIRC	1	CIRCULATE BTM'S UP AT 8,000 FT.	
	18:00 - 19:30	1.50	TRP	2	T.O.H TO 5200 FT.	
	19:30 - 21:00	1.50	CIRC	1	CIRCULATE BTM'S UP AND SPOT HEAVY ECD PILL.	
	21:00 - 01:00	4.00	TRP	2	FINISH TRIP OUT WITH BIT # 11	
6/15/2008	01:00 - 02:00	1.00	TRP	1	CHANGE OUT MUD MTR'S AND BITS	
	02:00 - 06:00	4.00	TRP	2	TRIP IN WITH BIT # 12	
	06:00 - 07:00	1.00	CIRC	1	CIRCULATE BTMS UP AT 5545'	
	07:00 - 10:00	3.00	TRP	2	TRIP IN HOLE TO 8235'	
	10:00 - 11:00	1.00	CIRC	1	CIRCULATE OUT GAS AT 8235'	
	11:00 - 12:30	1.50	TRP	2	TRIP IN FROM 8235' TO 9500'	
	12:30 - 15:00	2.50	CIRC	1	CIRCULATE HEAVY PILL OUT AT 9500'	
	15:00 - 16:30	1.50	TRP	2	TRIP IN HOLE FROM 9500' TO 11,200'	
	16:30 - 17:00	0.50	REAM	1	WASH & REAM 11,200' TO 11,356'	
	17:00 - 17:30	0.50	CIRC	1	CIRCULATE BTM'S UP AT 11,356'	
6/16/2008	17:30 - 18:00	0.50	CIRC	1	SHUT IN WELL & CIRCULATE OUT GAS	
	18:00 - 18:30	0.50	REAM	1	WASH & REAM 11,356' TO 11,365'	
	18:30 - 06:00	11.50	DRL	1	DRLG. F/ 11,365' TO 11,454' (89 FT.@ 7.7 FPH) (WOB 10/12.RPM 611,SPM 65X65 AT 3300 PSI AT 544 GPM.	
	06:00 - 06:30	0.50	RIG	1	RIG SERVICE	
	06:30 - 18:00	11.50	DRL	1	DRILG. F/ 11,454' TO 11,552' (98 FT@8.52 FPH)WOB 12,RPM 594,SPM 65X65,PSI 3300 AT 544 GPM.	
	18:00 - 18:30	0.50	RIG	1	RIG SERVICE	
	18:30 - 06:00	11.50	DRL	1	DRILG. F/ 11,552' TO 11,640' (88 FT@7.65 FPH)WOB 12,RPM 594,SPM 65X65,PSI 3300 AT 544 GPM.	
	6/17/2008	06:00 - 06:30	0.50	RIG	1	RIG SERVICE
		06:30 - 09:30	3.00	DRL	1	DRLG F/ 11,640' TO 11,657' (17 FT.@ 5.6 FPH) WOB 13,RPM 563,SPM 60X60 @ 503 GPM @ 3500 PSI
		09:30 - 10:00	0.50	CIRC	1	CIRCULATE AND CHECK DIFF.PRESSURE
10:00 - 10:30		0.50	SUR	1	DROP SURVEY	
10:30 - 12:00		1.50	CIRC	1	CIRCULATE BTM'S UP AT 11,657'	
12:00 - 12:30		0.50	CIRC	1	PUMP & SPOT HEAVY PILL	
12:30 - 17:30		5.00	TRP	2	TRIP OUT TO 5200 FT.	
17:30 - 18:30		1.00	CIRC	1	CIRCULATE BTM'S UP AT 5200 FT. AND SPOT 98 BBL. HEAVY PILL	
18:30 - 23:00		4.50	TRP	2	FINISH TRIP OUT	
23:00 - 00:00		1.00	TRP	1	CHANGE OUT BITS & MUD MTR'S	
6/18/2008	00:00 - 02:30	2.50	TRP	2	TIH TO 2000 FT	
	02:30 - 03:30	1.00	OTH		CHANGE OUT SAVER SUB & CORR. RINGKK	
	03:30 - 05:00	1.50	TRP	2	TRIP TO CSG. SHOE	
	05:00 - 06:00	1.00	RIG	6	CUT & SLIP DRLG. LINE	
	06:00 - 06:30	0.50	OTH		CENTER UP TOP DRIVE OVER HOLE	

CONFIDENTIAL

Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
6/18/2008	06:30 - 10:00	3.50	OTH		CHANGE OUT LWC VALVE ON TOP DRIVE
	10:00 - 10:30	0.50	TRP	2	TIH TO 5200 FT.
	10:30 - 11:30	1.00	CIRC	1	CIRCULATE BTM'S UP AT 5200 FT.
	11:30 - 14:00	2.50	TRP	2	TIH TO 9415 FT.
	14:00 - 15:30	1.50	CIRC	1	CIRCULATE BTM'S UP AT 9415 FT.
	15:30 - 17:30	2.00	TRP	2	TIH TO 11,609 FT.
	17:30 - 19:00	1.50	CIRC	1	CIRCULATE BTM'S UP THROUGH CHOKE
	19:00 - 19:30	0.50	REAM	1	WASH FROM 11,645' TO 11,609'
6/19/2008	19:30 - 06:00	10.50	DRL	1	DRLG. F / 11,657' TO 11,727' (70 @ 6.66 FPH) WOB 15,RPM 604,SPM 65X65 @ 3440 PSI @ 544 GPM
	06:00 - 12:00	6.00	DRL	1	DRLG F/ 11730 - 11776 (46 FT. @ 7.6 FPH) WOB 15, RPM 604,130 SPM @ 3200 PSI
	12:00 - 13:30	1.50	CIRC	1	CIRC. BTMS UP
	13:30 - 14:30	1.00	TRP	14	SHORT TRIP 10 STANDS
	14:30 - 17:00	2.50	CIRC	1	CIRC. BTMS. UP, SPOT 150 BBL. 12.5# PILL
	17:00 - 21:00	4.00	TRP	2	T.O.O.H. TO 5200' (SLM)
	21:00 - 22:00	1.00	CIRC	1	CIRC. BTMS UP SPOT 100 BBL. 12.5# PILL
	22:00 - 02:30	4.50	TRP	2	T.O.O.H. (SLM 11771,72) & LAY DOWN MONEL AND MUD MOTOR
6/20/2008	02:30 - 06:00	3.50	LOG	1	SAFETY MEETING W/ LOGGERS, INSTALL LOGGING ADAPTER,R.U. LOGGERS AND LOG, LOGGERS DEPTH 11780'
	06:00 - 08:30	2.50	LOG	1	LOG WITH TRIPPLE COMBO
	08:30 - 09:00	0.50	LOG	1	RIG DOWN HALLIB LOGERS
	09:00 - 12:30	3.50	TRP	15	M/U BIT & TIH TO 6031,FILL PIPE @ 2000
	12:30 - 13:30	1.00	CIRC	1	CIR OUT HEAVY PILL @ 6031
	13:30 - 15:30	2.00	TRP	15	TIH TO 9505
	15:30 - 17:00	1.50	CIRC	1	CIR OUT HEAVY PILL & GAS THROUGH CHOKE
	17:00 - 18:00	1.00	TRP	15	TIH TO 11695
	18:00 - 18:30	0.50	REAM	1	WASH F.11695 TO 11776,10 FT FILL
	18:30 - 22:00	3.50	CIRC	1	CIR OUT HEAVY PILL & GAS THROUGH CHOKE SPOT 150 BBL. 12.5# PILL @ 11776
6/21/2008	22:00 - 05:00	7.00	TRP	3	LAY DOWN 4.5" DRILL PIPE
	05:00 - 06:00	1.00			CIRC. BTMS UP AT 5200', SPOT 100 BBL 12.5# PILL
	06:00 - 11:30	5.50	TRP	3	TOH LAYING DOWN DP & BHA
	11:30 - 12:30	1.00	OTH		PULL WEAR BUSHING
6/22/2008	12:30 - 16:00	3.50	CSG	1	S/M,RIG UP FRANK'S CASING CREW, CENTER TOPDRIVE RAIL
	16:00 - 06:00	14.00	CSG	2	RUN 7" CASING W/ FRANKS
	06:00 - 06:30	0.50	CSG	2	RUN CASING F/ 11497 TO 11761 (265 JTS. RAN)
	06:30 - 08:00	1.50	CSG	2	LAND CASING, TOP SEAL OF HANGER DAMAGED, REPLACE SEAL AND RELAND CASING
	08:00 - 09:00	1.00	CSG	1	RIG DOWN CASING CREW
	09:00 - 13:30	4.50	CMT	1	RIG UP CEMENTERS (HALLIBURTON)
	13:30 - 14:00	0.50	CSG	1	L/D FILL UP TOOL
	14:00 - 14:30	0.50	RIG	7	SAFETY MEETING W/ HALLIBURTON,RIG CREW AND CO. REP.
	14:30 - 19:30	5.00	CMT	2	PRESS TEST CEMENT LINES TO 6000 PSI,NO2 LINES TO 8000 PSI AND CEMENT PUMP 10 BBL FRESH WATER AHEAD,30 BBL SUPERFLUCH ,10 BBL FRESH WATER BEHIND,PUMP FOAM SCAVENGER 115 SKS. @ 7.0 PPG, PUMP 1ST. LEAD 400 SKS. @ 9.5PPG, PUMPED 2ND. FOAMED LEAD 1600 SKS @ 11.0 PPG PUMP UNFOAMED TAIL 200 SKS. @ 14.3 PPG, DISPLACED W/ 442 BBL. FRESH WATER,BUMP PLUG AND HOLD F/ 5 MIN. FLOATS HELD, PUMP CAP CEMENT 200 SKS @ 14.6 PPG
	19:30 - 20:00	0.50	OTH		L/D LANDING JOINT
20:00 - 04:00	8.00	BOP	1	NIPPLE DOWN BOP, LAY DOWN ROTATINGHEAD , PULL OUT SPACER SPOOL AND REPLACE WITH C-SECTION	

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
6/22/2008	04:00 - 06:00	2.00	BOP	1	NIPPLE UP BOP AND TEST C-SECTION
6/23/2008	06:00 - 08:00	2.00	BOP	2	CHANGE LOWER PIPE RAMS TO 4", FUNCTION TEST KOOMEY
	08:00 - 10:00	2.00	OTH		PREPARE TOPDRIVE FOR TESTING, CHANGE DIES, THROW AWAY SUB HANG BAILS AND ELEVATORS
	10:00 - 16:00	6.00	BOP	2	BREAKOUT TESTERS SUB & RIG UP BOP TESTERS, TEST ANN. TO 5000 PSI 10 MIN 250 PSI 5 MIN, MUD LINES TO 3500 PSI, BLIND RAMS, UPPER AND LOWER PIPE RAMS 10,000 PSI HIGH TEST 250 PSI LOW TEST, CHOKE, BOP INNER VALVE, KILL LINE TO 10,000 PSI HIGH TEST, 250 PSI LOW TEST, TOPDRIVE VALVES, FLOOR VALVE TIW VALVE 10,000 PSI HIGH, 250 PSI LOW, TEST CASING TO 2600 PSI FOR 30 MIN.
	16:00 - 18:00	2.00	OTH		RIG UP FLARE LINES AND BUSTER
6/24/2008	18:00 - 23:00	5.00	BOP	1	NIPPLE UP ROTATINGHEAD, ORBIT VALVE AND FLOW LINE
	23:00 - 06:00	7.00	CIRC	6	BUILD MUD VOLUME, WORK ON GAS BUSTER,
	06:00 - 06:00	24.00	OTH		HELP WELDERS RIG UP FLOW LINE, DRIP PAN, SHAKER TROUGH, FINISH GAS BUSTER, HOOK UP FLARE LINES, INSTALL ROTATINGHEAD BEARING PACK, LOAD PIPE RACKS WITH 4 3/4" BHA AND STRAP. WT. UP MUD TO 13.5# PPG. (TWO HANDS SHORT ON MORNING TOUR)
6/25/2008	06:00 - 11:00	5.00	OTH		STRAP PIPE, WT. UP MUD TO 13.6#, R/U FLARE IGNITER, INSTALL WEAR BUSHING, R/U FILLUP LINE
	11:00 - 12:00	1.00	RIG	1	LUBRICATE DRAWWORKS AND TOP DRIVE
	12:00 - 20:00	8.00	RIG	2	WORK ON TOP DRIVE W/ CANRIG ELECTRICIAN
	20:00 - 00:00	4.00	TRP	1	CHANGE ELEVATORS, RUN IN HOLE TO 1258' FILL PIPE
6/26/2008	00:00 - 02:00	2.00	RIG	2	CENTER TOPDRIVE RAIL, IDM HAND LOADED POWER LIMIT SOFTWARE,
	02:00 - 06:00	4.00	TRP	2	PICKUP 4" DRILL PIPE
	06:00 - 10:00	4.00	TRP	2	PICKUP D.P. TO 6257
	10:00 - 11:00	1.00	RIG	1	RIG SERVICE
	11:00 - 18:30	7.50	TRP	2	PICKUP 4" D.P., TAGGED UP AT 11,520'
	18:30 - 19:00	0.50	RIG	2	WORK ON POWER LIMIT W/ IDM HAND
	19:00 - 20:00	1.00	OTH		INSTALL ROTATINGHEAD RUBBER
	20:00 - 21:30	1.50	CIRC	1	DISPLACE WATER WITH 13.5# MUD IN CASING
	21:30 - 06:00	8.50	RIG	2	WORK ON POWER LIMIT, TRY AND PULL TORQUE BOOST, WOULD NOT COME OUT, WAIT ON MECHANIC
	6/27/2008	06:00 - 06:00	24.00	RIG	2
6/28/2008	06:00 - 04:30	22.50	RIG	2	CHANGE OUT TOPDRIVE TRACTION MOTOR,
6/29/2008	04:30 - 06:00	1.50	OTH		STRING BLOCKS BACK TO 10 LINES
	06:00 - 07:00	1.00	OTH		STRING UP ON 10 LINES
	07:00 - 13:00	6.00	RIG	2	CONTINUE HOOKING UP TOP DRIVE & TEST
	13:00 - 19:30	6.50	RIG	2	IDM REPROGRAMING TLC
	19:30 - 22:30	3.00	REAM	1	SAFETY REAM F/ 11,520 TO 11,667, DRILL FLOAT EQUIP @ 11,667', AND FLOAT SHOE. @ 11,776'
	22:30 - 23:00	0.50	DRL	1	DRLG F/ 11,776' TO 11,787' (10K WOB, 80 RPM 65 SPM)
	23:00 - 23:30	0.50	CIRC	1	CIRC BOTTOMS UP
	23:30 - 00:00	0.50	EQT	2	PREFORM F.I.T. (1170 PSI E.M.W. 15.5 HELD F/ 15 MIN.)
	00:00 - 05:00	5.00	DRL	1	DRILL F/ 11,787 TO 11,874 (103' @ 17.1 FPH) 10K WOB 80 RPM 65 SPM
	05:00 - 05:30	0.50	RIG	1	RIG SERVICE
6/30/2008	05:30 - 06:00	0.50	DRL	1	DRLG F/ 11,874 TO 11,890 (16' @ 32 FPH) 10K WOB 80 RPM 65 SPM
	06:00 - 14:00	8.00	DRL	1	DRLG F/ 11890 TO 12073 (183 FT @ 22.8 FPH) WOB 12-14, RPM 70-90, GPM 210-228
	14:00 - 14:30	0.50	RIG	1	SERVICE RIG & TOP DRIVE
	14:30 - 19:00	4.50	DRL	1	DRLG F/ 12073 TO 12,200 (127 @ 50.8 FPH) WOB 12-14, RPM 70 - 90, GPM

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
6/30/2008	14:30 - 19:00	4.50	DRL	1	210-228
	19:00 - 20:30	1.50	CIRC	5	CIRC. UP A SAMPLE @ 12,200'
	20:30 - 21:30	1.00	EQT	2	PREFORM F.I.T 15.4 E.M.W.
	21:30 - 23:30	2.00	CIRC	1	CIRC. BTMS UP
	23:30 - 00:00	0.50	OTH		FLOW CHECK (1" STREAM) TOH 4 STANDS
	00:00 - 01:30	1.50	CIRC	1	DISPLACE WATER MUD W/ INVERT MUD
	01:30 - 05:00	3.50	CIRC	1	CIRC. 2 BTMS UP AND BUILD E.C.D. PILL
7/1/2008	05:00 - 06:00	1.00	CIRC	1	BUILD AND SPOT 75 BBL 15.5 PPG ECD PILL @ 11773
	06:00 - 07:00	1.00	TRP	10	TOH F/11760 TO 9929
	07:00 - 07:30	0.50	CIRC	1	MIX DRY PILL
	07:30 - 08:30	1.00	RIG	1	SERVICE RIG & TOP DRIVE
	08:30 - 14:00	5.50	TRP	10	TOH F/9929,PULL ROTATING HEAD
	14:00 - 14:30	0.50	TRP	1	CHANGE BIT & P/U MOTOR
	14:30 - 20:30	6.00	TRP	10	TIH W/ BIT #16 TO 11761
	20:30 - 21:30	1.00	CIRC	1	CIRC GAS OUT @ 11761 4450 UNITS GAS WITH A 40' FLARE,
	21:30 - 03:30	6.00	RIG	2	WAIT ON REGULATOR BOARD F/ MUD PUMPS (IDM CHANGED BOARD OUT @ 0300)
	03:30 - 04:00	0.50	TRP	2	T.I.H. SAFETY REAM F/ 12102 TO 12200
	04:00 - 06:00	2.00	DRL	1	DRLG F/ 12200' TO 12276 (76 FPH @ 38 FPH) WOB 8, RPM 120, SPM 65
7/2/2008	06:00 - 09:30	3.50	DRL	1	DRLG F/12276 TO 12388 (112 FT @ 32 FPH) WOB 4-8,RPM 158-163,GPM 228
	09:30 - 10:00	0.50	RIG	2	TROUBLE SHOOT DRAW WORKS FAULT
	10:00 - 10:30	0.50	DRL	1	DRLG F/12388 TO 12405
	10:30 - 12:00	1.50	RIG	2	PULL 1 STAND,REPAIR DRAW WORKS FAULT
	12:00 - 16:00	4.00	DRL	1	DRLG F/12405 TO 12583 (178 FT @ 44.5 FPH) WOB 4-8.RPM 158-163 GPM 228
	16:00 - 16:30	0.50	RIG	1	RIG SERVICE
	16:30 - 20:00	3.50	DRL	1	DRLG F/ 12583 TO 12649 (66 FT @ 18.8 FPH) WOB 5-10,RPMM 158-163 GPM 228
	20:00 - 21:00	1.00	OTH		PRESS. LOSS, BLEED OFF PUMPS THRU FILL UP LINE, PRESS RETURNED
21:00 - 22:00	1.00	DRL	1	DRLG F/ 12649 - 12668 (19 FT @ 19 FPH)	
22:00 - 02:00	4.00	OTH		PRESS LOSS @ BOTH MUD PUMPS, GO THRU PUMPS, CLEAN OUT SOLIDS SUCTION MANIFOLD AND CHARGER PUMP LINES REASSEMBLE LINES, NO CHANGE	
7/3/2008	02:00 - 03:00	1.00	TRP	2	TRIP OUT TO SHOE AND EMPTY SUCTION TANK
	03:00 - 06:00	3.00	OTH		DISASSEMBLE SUCTION LINES FROM TANKS TO MUD PUMPS , CHECK SUCTION LINES IN PITS FOR ANY OBSTRUCTIONS.
7/3/2008	06:00 - 09:30	3.50	RIG	2	DISASSEMBLE SUCTION LINES FROM TANKS TO MUD PUMPS , CHECK SUCTION LINES IN PITS FOR ANY OBSTRUCTIONS., REMOVE CHARGING PUMP & CHECK IMPELLAR
	09:30 - 15:00	5.50	RIG	2	FILL SUCTION TANK, PRESSURE TEST MUD PUMP ON SURFACE-OK, ATTEMPT TO PUMP DOWN HOLE-NO PRESSURE, R/U BOTH CHARGING PUMPS ON ONE PUMP-NO PRESSURE, USE #2 CHARGING PUMP ON #1 PUMP-PRESSURE OK, USED #1 CHARGING PUMP ON #1 PUMP, HAD PRESSURE THEN DROPPED OFF
	15:00 - 22:30	7.50	RIG	2	CHANGE OUT BOTH CHARGING PUMP, TEST BOTH PUMPS
	22:30 - 23:00	0.50	TRP	2	TIH
	23:00 - 00:00	1.00	CIRC	1	CIR BTM'S UP
7/4/2008	00:00 - 06:00	6.00	DRL	1	DRLG F/12668 TO 12865 (197 FT 32.83 FPH) WOB 8-10, RPM 160, GPM 250
	06:00 - 16:00	10.00	DRL	1	DRLG F/12865 TO 13264 (399 FT 39.9 FPH) WOB 8-10 RPM 160 GPM 250
	16:00 - 16:30	0.50	RIG	1	RIG SERVICE
	16:30 - 04:30	12.00	DRL	1	DRLG F/13264 TO 13654 (390FT 32.5 FPH) WOB 8-10 RPM 160 GPM 250
	04:30 - 06:00	1.50	RIG	2	RIG REPAIR, WORK ON PUMPS-NO PRESSURE, WELL FLOWING, SHUT IN WELL
7/5/2008	06:00 - 08:30	2.50	WCL	1	CIR GAS OUT THROUGH CHOKE, SHUT IN CASING PRESSURE 2374 PSI,

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
7/5/2008	06:00 - 08:30	2.50	WCL	1	SIDPP 400 PSI, 40 FT FLARE
	08:30 - 10:30	2.00	WCL	1	SHUT IN & MONITOR PRESSURE, SICP 1275 PSI, SIDPP 400 PSI, RAISE MUD TO 15 PPG
	10:30 - 13:30	3.00	WCL	1	PUMP 15 PPG KILL MUD, 35 FT FLARE
	13:30 - 16:00	2.50	WCL	1	SHUT IN & MONITOR PRESSURE, SICP 1500 PSI, SIDPP 125 PSI, RAISE MUD TO 15.3 PPG
	16:00 - 22:00	6.00	WCL	1	PUMP 15.3 PPG KILL MUD, CLOSE ORBIT VALVE, OPEN BOP & CONT CIR, ORBIT VALVE LEAKING, PRESSURE DAMAGED FLEX FLOW LINE, SHUT IN WELL & CONT CIR THROUGH CHOKE, HOLDING 400 TO 600 PSI BACK PRESSURE ON CHOKE TO MANTAIN CONSTANT PIT LEVEL
	22:00 - 05:30	7.50	CIRC	1	CIR THROUGH CHOKE, BUILD FLOW LINE & CHANGE OUT ORBIT VALVE
7/6/2008	05:30 - 06:00	0.50	CIRC	1	SETTING DRILLING PARAMETERS TO DRILL THROUGH CHOKE
	06:00 - 17:00	11.00	DRL	1	DRLG F/13654 TO 13,946' (292' AT 26.54 FPH) WOB 8/12,RPM 30,SPM 68,PSI 3500,AT 239 GPM
	17:00 - 17:30	0.50	RIG	1	RIG SERVICE
7/7/2008	17:30 - 06:00	12.50	DRL	1	DRLG F/13,946 TO 14,260 THROUGH CHOKE (314' AT 25.12 FPH) WOB 8/12,RPM 30,SPM 68,PSI 3500,AT 239 GPM,SHUT IN CASING PRESSURE FROM 590 TO 490 PSI DURING CONNECTIONS.
	06:00 - 14:00	8.00	DRL	1	DRILLING THROUGH CHOKE F/ 14,260' TO 14,531' (271'@33.87 FPH)WOB 10/12,RPM 38,SPM 58,AT 204 GPM
	14:00 - 14:30	0.50	RIG	1	RIG SERVICE
	14:30 - 15:00	0.50	DRL	1	DRILLING THROUGH CHOKE F/ 14,531' TO 14,555' (24'@48.00 FPH)WOB 10/12,RPM 38,SPM 58,AT 204 GPM
	15:00 - 15:30	0.50	CIRC	1	PICK UP & CIRCULATE OUT GAS THROUGH CHOKE AT 14,555'
7/8/2008	15:30 - 06:00	14.50	DRL	1	DRLG THROUGH CHOKE F/14531 TO 14,861'(330' @ 22.75 FPH)WOB 10/12,RPM 38,SPM 58,AT 204 GPM
	06:00 - 14:00	8.00	DRL	1	DRLG F/14861 TO 15018 THROUGH CHOKE (157 FT 19.62 FPH) WOB 10-14. RPM 156, GPM 204
	14:00 - 14:30	0.50	RIG	1	RIG SERVICE
	14:30 - 22:00	7.50	DRL	1	DRLG F/15018 TO 15,142' (124 FT.@16.53 FPH) WOB 10/14,RPM 156,GPM 20-4
	22:00 - 01:30	3.50	CIRC	1	CIRCULATE AND MIX LCM,LOST APPROX.90 BBL'S MUD,PUMP & SPOT 150 BBL HEAVY PILL AND DISPLACE WITH 150 BBL'S OF 15.5 PPG. MUD STRING FLOAT NOT HOLDING,ATTEMPT TO SEAT FLOAT BY PUMPING & RELEASING PRESSURE,DRILL PIPE PRESSURE AT 360 PSI.
	01:30 - 02:30	1.00	OTH		MIX & PUMP HEAVY KILL PILL 18.0 PPG. TO HOLD BACK DRILL STRING PRESSURE
	02:30 - 04:00	1.50	OTH		TRIP OUT TO 11,000 FT. TO CIRCULATE OUT GAS AND SPOT 2ND HEAVY PILL
7/9/2008	04:00 - 06:00	2.00	TRP	2	TRIP OUT TO 11,000 FT. TO CIRCULATE OUT GAS AND SPOT 2ND HEAVY PILL
	06:00 - 06:30	0.50	TRP	2	STRIP OUT OF HOLE TO 10,925'
	06:30 - 10:00	3.50	CIRC	1	CIRCULATE BOTTOMS UP AND DISPLACE FIRST HEAVY PILL
	10:00 - 10:30	0.50	OTH		SHUT IN WELL TO MONITOR PRESSURE (CSG. 385 PSI / DRILL PIPE 445 PSI)
	10:30 - 12:00	1.50	CIRC	1	CIRCULATE BOTTOMS UP AT 10,925'
	12:00 - 13:30	1.50	OTH		SHUT DOWN PUMPS TO MONITOR FLOW / SICP 174 PSI SIDP 0 PSI
	13:30 - 15:00	1.50	CIRC	1	CIRCULATE BOTTOMS UP
	15:00 - 16:00	1.00	CIRC	1	PUMP & SPOT 100 BBL. HEAVY PILL
	16:00 - 23:30	7.50	TRP	2	FINISH TRIP OUT - FLOW CHECK AT 8000 FT. AND AT BHA
	23:30 - 00:00	0.50	TRP	1	CHANGE OUT BITS & MUD MTR'S
	00:00 - 05:30	5.50	TRP	2	TRIP IN WITH BIT # 17
7/10/2008	05:30 - 06:00	0.50	CIRC	1	FILL PIPE & BREAK CIRC. AT 8500',HAD 200 PSI ON DRILL PIPE WITH PUMP OFF,CIRC. BTMS UP
	06:00 - 06:30	0.50	CIRC	1	CIR OUT HEAVY PILL & FLOW CHECK, 6 BBL HR
	06:30 - 07:30	1.00	TRP	2	TIH TO 9850 FT
	07:30 - 08:00	0.50	CIRC	1	FLOAT NO HOLDING, PUMP 20 BBL SLUG

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
7/10/2008	08:00 - 09:00	1.00	TRP	2	TOH TO 11700 FT
	09:00 - 11:00	2.00	CIRC	1	FLOW CHECK, WELL FLOWING, SHUT IN WELL & CIR OUT GAS, MAX FLARE 60FT, GAINED 60 BBL
	11:00 - 12:00	1.00	RIG	6	SLIP & CUT DRLG LINE, CONT CIRCULATING
	12:00 - 13:00	1.00	TRP	2	TIH TO 12,678'
	13:00 - 15:00	2.00	CIRC	1	SHUT IN WELL AND CIRCULATE OUT GAS AT 12,678'
	15:00 - 16:00	1.00	TRP	2	TIH TO 13,658' HIT BRIDGE
	16:00 - 20:00	4.00	OTH		STRING PLUGGED, UNABLE TO CIRCULATE HOLE
	20:00 - 03:00	7.00	FISH	4	R/U WIRELINE TRUCK, RUN IN WITH PERF GUN AND PERFERATE BOTTOM DRILL COLLAR AT 13,590'
7/11/2008	03:00 - 06:00	3.00	CIRC	1	CIRCULATE OUT GAS AT 13,590' THROUGH CHOKE
	06:00 - 10:30	4.50	CIRC	1	CIRCULATING GAS OUT THROUGH CHOKE
	10:30 - 12:00	1.50	OTH		PUMP & SPOT 250 BBL HEAVY PILL AT 13,550'
	12:00 - 18:30	6.50	TRP	2	TRIP OUT
	18:30 - 19:30	1.00	TRP	1	LAY DOWN PERFERATED DRILL COLLAR AND CHANGE OUT MUD MTR'S, UNPLUG MONEL DRILL COLLAR
	19:30 - 00:30	5.00	TRP	2	TIH TO 9148, FILL PIPE EVERY 10 STD
	00:30 - 02:30	2.00	CIRC	1	CIR OUT PILL
	02:30 - 03:30	1.00	TRP	2	TIH TO 11255, FILL PIPE EVERY 10 STD
7/12/2008	03:30 - 05:30	2.00	CIRC	1	CIR OUT PILL AT 11,255'
	05:30 - 06:00	0.50	TRP	2	T.I.H
	06:00 - 07:00	1.00	TRP	2	T.I.H TO 13,448'
	07:00 - 07:30	0.50	REAM	1	WASH & REAM 13,448' TO 13,550'
	07:30 - 08:30	1.00	CIRC	1	CIRC. GAS OUT THROUGH CHOKE AT 13,550'
	08:30 - 09:00	0.50	REAM	1	WASH & REAM FROM 13,550' TO 13,740'
	09:00 - 10:30	1.50	TRP	2	T.I.H 13,740' TO 15,017'
	10:30 - 11:00	0.50	REAM	1	WASH & REAM FROM 15,017' TO 15,142'
	11:00 - 12:00	1.00	CIRC	1	CIRC. GAS OUT THROUGH CHOKE AT 15,142'
	12:00 - 14:30	2.50	DRL	1	DRLG. F/ 15,142' TO 15,212' (88 FT. @35.2 FPH) WOB 8/10, RPM 156, SPM 60,210 GPM
	14:30 - 15:00	0.50	RIG	1	RIG SERVICE
	15:00 - 06:00	15.00	DRL	1	DRLG. F/ 15,212' TO 15,440' (228 FT. @13.02 FPH) WOB 8/10, RPM 156, SPM 60,210 GPM (HOLDING 100 PSI BACK PRESSURE WITH CHOKE WHILE DRILLING)
7/13/2008	06:00 - 07:00	1.00	DRL	1	DRLG F/15440 TO 15446
	07:00 - 08:00	1.00	TRP	12	PUMP PILL & TOH TO 13550, STRIP OUT THROUGH ROTATING RUBBER & CHOKE
	08:00 - 10:30	2.50	CIRC	1	CIR BTM'S UP & SPOT 250 BBL ECD PILL 16.8 PPG
	10:30 - 16:00	5.50	TRP	12	TOH, FLOW CHECK @5500 FT, 1/4" FLOW
	16:00 - 17:00	1.00	TRP	1	CHANGE OUT MOTORS & BIT, ATTEMPT TO DRAIN MOTOR, 1600 FT/LB TO ROTATE MOTOR
	17:00 - 18:30	1.50	TRP	2	TIH W/BHA
	18:30 - 20:30	2.00	TRP	2	FILL BHA, STRING PLUGGED, TRIP OUT TO BIT WET
	20:30 - 21:00	0.50	TRP	1	CHANGE OUT MUD MTR'S, UNPLUG MONEL DRILL COLLAR
	21:00 - 21:30	0.50	OTH		CLEAN UP RIG FLOOR OF OBM
	21:30 - 23:00	1.50	TRP	2	T.I.H WITH BHA, FILL AND PUMP MUD TWO TIMES
	23:00 - 23:30	0.50	RIG	1	RIG SERVICE, ADJUST TOP DRIVE TRACK
	23:30 - 03:30	4.00	TRP	2	T.I.H, TO 9178 FT, FILL PIPE EVERY 10 STD'S
7/14/2008	03:30 - 04:30	1.00	CIRC	1	CIR OUT ECD PILL
	04:30 - 06:00	1.50	TRP	2	TIH TO 11417 FT, FILL PIPE EVERY 10 STD'S
	06:00 - 07:30	1.50	CIRC	1	CIRC. OUT ECD PILL AT 11,400'
	07:30 - 08:30	1.00	TRP	2	T.I.H TO 13,550' (STRIP IN USING CHOKE)
	08:30 - 10:00	1.50	CIRC	1	CIRC. OUT ECD PILL AT 13,550'

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
7/14/2008	10:00 - 11:30	1.50	TRP	2	T.I.H 15,250' (STRIP IN USING CHOKE)
	11:30 - 12:00	0.50	REAM	1	WASH & REAM F/ 15,250' TO 15,446'
	12:00 - 16:00	4.00	DRL	1	DRLG. F/ 15,446' TO 15,504' (58' AT 14.5 FPH)WOB 10,RPM 30,PSI 3020,SPM 55 AT 193 GPM
	16:00 - 16:30	0.50	RIG	1	RIG SERVICE
	16:30 - 06:00	13.50	DRL	1	DRLG. F/ 15,504' TO 15,900' (396' AT 29.3 FPH)WOB 10,RPM 30,PSI 3020,SPM 55 AT 193 GPM
7/15/2008	06:00 - 14:00	8.00	DRL	1	DRLG. F/ 15,900' TO 16,093'(193' AT 24.12 FPH)WOB 10,RPM 116,PSI 2950,SPM 55 AT 193 GPM
	14:00 - 14:30	0.50	RIG	1	RIG SERVICE
	14:30 - 02:00	11.50	DRL	1	DRLG. F/ 16,093' TO 16,318(225' AT 19.56 FPH)WOB 10,RPM 116,PSI 2950,SPM 55 AT 193 GPM
	02:00 - 03:30	1.50	CIRC	1	CIRC. BOTTOMS UP AT 16,318'
7/16/2008	03:30 - 05:00	1.50	TRP	2	TRIP OUT TO 13,500'
	05:00 - 06:00	1.00	CIRC	1	CIRC. BTMS UP AT 13,500
	06:00 - 07:00	1.00	CIRC	1	PUMP & SPOT ECD PILL AT 13,500'
	07:00 - 13:30	6.50	TRP	2	T.O.H , LAY DOWN MUD MTR.
	13:30 - 20:00	6.50	TRP	2	MAKR UP BIT #19 T.I.H,FILL PIPE EVERY 25 STD'S
	20:00 - 21:00	1.00	RIG	6	CUT & SLIP DRILLING LINE
	21:00 - 23:00	2.00	CIRC	1	CIRC. ECD PILL UP AT 10,600 FT.
	23:00 - 00:30	1.50	TRP	2	T.I.H TO 13,000 FT.
	00:30 - 03:30	3.00	CIRC	1	CIRC. OUT ECD PILL AT 13,240 FT.
	03:30 - 04:00	0.50	TRP	2	TIH TO 15936
	04:00 - 04:30	0.50	REAM	1	WASH & REAM 15,936' TO 16,318'
	04:30 - 05:00	0.50	DRL	1	DRLG. FROM 16,318' TO 16,322'
	05:00 - 05:30	0.50	CIRC	1	CIRC. OUT GAS THROUGH CHOKE
7/17/2008	05:30 - 06:00	0.50	DRL	1	DRLG F/16322 to 16330
	06:00 - 18:00	12.00	DRL	1	DRLG F/16330 TO 16440 (110 FT @ 9.1 FPH) WOB 9-11,RPM 65,GPM 197
	18:00 - 03:00	9.00	DRL	1	DRLG F/16440 TO 16492 WOB 10-12 K SPM 55 = 190 GPM RPM 55-65 ROP 4-20
7/18/2008	03:00 - 05:00	2.00	TRP	8	FLOW CHECK // PUMP PILL // SHUT IN PSI 200 // STRIP OUT OF HOLE TO 13600
	05:00 - 06:00	1.00	CIRC	1	SPOT ECD PILL 150 BBLS @ 16.8# FLOW CHECK //
	06:00 - 12:30	6.50	TRP	10	TOH FOR BIT #19,F/13570 TO 10225 STRIP OUT THROUGH ROTATING HEAD TO CONTROL SWABBING
	12:30 - 13:00	0.50	TRP	10	CHANGE BIT & CLEAN FLOOR
	13:00 - 19:00	6.00	TRP	10	TIH WITH BIT #20 FILL PIPE EVERY 4000'
	19:00 - 21:30	2.50	CIRC	2	LOSS CIRC DUE TO DRILLER SHUT HCR VALVE LOSS
	21:30 - 22:30	1.00	TRP	2	TOOH WET 10STS
	22:30 - 23:30	1.00	CIRC	2	CIRC 20% RETURNS LOSS 150BBLS TO HOLE
	23:30 - 00:00	0.50	TRP	2	TOOH WET 15 STS
	00:00 - 02:00	2.00	CIRC	1	CIRC OUT HEAVY MUD FULL RETURNS GET BACK 70 BBLS MUD @ 20-30 SPM
7/19/2008	02:00 - 03:00	1.00	TRP	2	TIH 10 STS
	03:00 - 05:00	2.00	CIRC	1	CIRC OUT HEAVY MUD @40-50 SPM FULL RETURNS
	05:00 - 06:00	1.00	TRP	2	TIH 15 STS BACK TO SHOE
	06:00 - 09:00	3.00	CIRC	1	SHUT IN WELL & CIR OUT GAS THROUGH CHOKE WITH 40 FT FLARE @ 11725, 100% RETURNS
	09:00 - 10:30	1.50	TRP	10	TIH TO 13725
	10:30 - 16:30	6.00	CIRC	1	SHUT IN WELL & CIR OUT GAS THROUGH CHOKE WITH 80 FT FLARE, 100% RETURNS
	16:30 - 18:00	1.50	TRP	10	TIH TO 16400
	18:00 - 18:30	0.50	REAM	1	WASH-REAM 16400- 16492 NO FILL

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
7/19/2008	18:30 - 05:30	11.00	DRL	1	DRLG AHEAD F/ 16492-16545 WOB 4-5 K SPM 65 = 2750 PSI RPM40 BGG 1800 UNITS MIN FLARE // ROP 3-9 FPH MUD WT 15.4 VIS 45
	05:30 - 06:00	0.50	RIG	1	RIG SERVICE ROUTINE
7/20/2008	06:00 - 09:30	3.50	DRL	1	DRLG F/16545 TO 16557 (12 @ 3.4 FPH) WOB 4-5,RPM38-41,GPM 221,MW 15.4
	09:30 - 10:00	0.50	RIG	1	SERVICE RIG & TOP DRIVE
	10:00 - 16:30	6.50	DRL	1	DRLG F/16557 TO 16580 (23 FT @ 3.5 FPH) WOB 4-5,RPM 38-40,GPM 221-158,MW 15.4, LOST 55 BBL MUD @ 16564-DRILLING @ 158 GPM W/100% RETURNS
	16:30 - 17:30	1.00	OTH		REAM TIGHT SPOT @ 16565 FT
	17:30 - 00:00	6.50	DRL	1	DRLG F/16580 TO 16595
	00:00 - 00:30	0.50	CIRC	1	SPOT LCM PILL ON BOTTOM
	00:30 - 02:00	1.50	OTH		WORK TIGHT HOLE F/ 16595- 16560 REAM X2
	02:00 - 04:30	2.50	TRP	8	PUMP PILL / STRIP OUT HOLE TO 13535
	04:30 - 06:00	1.50	CIRC	1	SPOT ECD PILL 200 BBLs 16.8# DISPLACE / PUMP DRY PILL
7/21/2008	06:00 - 11:30	5.50	TRP	10	TOH FOR BIT #20 F/13535
	11:30 - 12:00	0.50	TRP	10	CHANGE BIT,CLEAN FLOOR
	12:00 - 15:00	3.00	TRP	10	TIH WITH BIT #21 TO 5290,INSTALL ROTATING HEAD
	15:00 - 16:30	1.50	RIG	6	SLIP & CUT 60 FT DRILLING LINE
	16:30 - 18:00	1.50	CIRC	1	CIR OUT GAS @ 5290 FT,FLOW CHECK
	18:00 - 19:30	1.50	TRP	10	TIH F/5290 TO 9980
	19:30 - 22:00	2.50	CIRC	1	CIR OUT ECD PILL
	22:00 - 23:00	1.00	TRP	2	TIH 9981-12190
	23:00 - 01:30	2.50	CIRC	1	SHUT IN WELL CIRC THRU CHOKE 75' FLARE
	01:30 - 02:30	1.00	TRP	2	STRIP IN HOLE 12190-13735 CASING PRESSURE UP 750 PSI
	02:30 - 04:30	2.00	CIRC	1	SHUT WELL CIRC
	04:30 - 05:30	1.00	TRP	2	STRIP INHOLE 13735-16490 CASING PRESSURE 50-75 PSI
	05:30 - 06:00	0.50	CIRC	1	CIRC OUT GAS
7/22/2008	06:00 - 09:00	3.00	CIRC	1	CIR OUT GAS & REAM TIGHT SPOT
	09:00 - 19:00	10.00	DRL	1	DRLG F/16595 TO16648 WOB 20K SPM 45 PRESSURE 1100 PSI
	19:00 - 21:00	2.00	CIRC	1	LOSS 140 BBLs IN HOLE P/U CIRC / BUILD VOLUME
	21:00 - 02:00	5.00	DRL	1	DRLG AHEAD F/ 16648 - 16669 TOTAL DEPTH REACHED
	02:00 - 06:00	4.00	CIRC	1	PUMPED LCM SWEEP -CIRC COND BOTTOM UP @ 20 SPM
7/23/2008	06:00 - 11:00	5.00	CIRC	1	CIR AT REDUCED PUMP RATE--BUILD VOLUME & CONDITION MUD
	11:00 - 12:00	1.00	TRP	14	SHORT TRIP 10 STD
	12:00 - 20:00	8.00	CIRC	1	CIR OUT GAS & CONDITION MUD--BUILD ECD PILL WAIT ON ROCKY MOUNTAIN CASING TO GET ON ROAD
	20:00 - 23:00	3.00	TRP	8	FLOW CHECK WELL FLOWING // PUMP PILL STRIP OUT OF HOLE TO 13535
	23:00 - 01:30	2.50	CIRC	1	CIRC - PUMP ECD PILL @250 BBLs DISPLACE - PUMP PILL
	01:30 - 03:00	1.50	TRP	8	STRIP OUT HOLE TO 8100 FLOW / SWAB CHECK OK
	03:00 - 06:00	3.00	TRP	2	TOOH USING TRIP TANK //
7/24/2008	06:00 - 07:00	1.00	TRP	2	BREAK OUT BIT,L/D DC & MONEL
	07:00 - 08:00	1.00	CSG	1	PULL BEARING PACK,PULL WEAR BUSHING,INSTALL BEARING PACK
	08:00 - 10:30	2.50	CSG	1	S/M,CHANGE OUT BAILS & SAVER SUB,R/U ROCKY MOUNTAIN CSG CREW & FILL TOOL,NOTIFIED VERNAL BLM'S CADE TAYLOR OF CSG & CEMENT JOB AND RECEIVED EXTENTION ON BOP TEST TO FINISH WELL ON 7/21/2008 @ 10:00 HRS
	10:30 - 17:30	7.00	CSG	2	RUN 4 1/2 PROD CASING TO 7850
	17:30 - 18:00	0.50	CIRC	1	CIR OUR ECD PILL
	18:00 - 19:30	1.50	CSG	2	RUN 4 1/2 CSG TO 9352
	19:30 - 20:30	1.00	CIRC	1	CIR OUT ECD PILL
	20:30 - 22:00	1.50	CSG	2	RUN 4 1/2 CSG TO 11400
	22:00 - 23:00	1.00	CIRC	1	CIRC ECD
	23:00 - 00:00	1.00	CSG	2	RUN 4 1/2 CSG TO 13700

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
7/24/2008	00:00 - 01:30	1.50	CIRC	1	CIRC ECD FLARE 35'
	01:30 - 03:00	1.50	CSG	2	RUN CSG TO 16490
	03:00 - 05:00	2.00	CIRC	1	WASH 135' TO BOTTOM SPACE OUT L/D 1 JT P/U 2-PUPS
7/25/2008	05:00 - 06:00	1.00	CSG	1	R/D CASING CREW
	06:00 - 07:00	1.00	CSG	1	RIG DOWN CSG CREW & FILL TOOL
	07:00 - 10:00	3.00	CIRC	1	PUMP 70 BVBL LCM PILL WITH NO RETURNS
	10:00 - 12:00	2.00	CMT	1	S/M. RIG UP HALLIBURTON
	12:00 - 17:30	5.50	CMT	2	P/T LINES TO 12000 PSI, CEMENT W/30 BBLS TUNED SPACER, 800 SX OF 15.8 PPG CMT, DISPLACE WITH 237 BBL CLAYFIX WATER, BUMPED PLUG-HELD 8600 PSI FOR .5 HRS, FLOATS HELD, SHUT IN WITH 2500 PSI ON CSG
	17:30 - 18:30	1.00	CMT	1	R/D HALLIBURTON
	18:30 - 02:30	8.00	CMT	2	WELL SHUT IN WITH 2500 PSI, PRESS BUILDING TO 3000 PSI-BLEEDING OFF GAS
	02:30 - 04:00	1.50	WCL	2	BLOW DOWN WELL SLOW 3000 PSI TO 0 PSI 20-30 FLARE 3 BBLS RETURNS
	04:00 - 06:00	2.00	CIRC	3	LOAD HOLE W/ TRIP TANK HOLE TOOK 67 BBLS OF 14 #MUD MONITER WELL
	7/26/2008	06:00 - 08:00	2.00	CIRC	3
08:00 - 10:30		2.50	CIRC	1	BUILD PUMP 17 PPG PILL THROUGH KILL LINE @ 5BBLS EVERY 10 MIN
10:30 - 15:30		5.00	LOG	3	R/U RUN BOND CBL W/ BWL
15:30 - 17:00		1.50	BOP	1	SHUT WELL FLOWING BUILD 18 PPG PILL 4 BOLT STACK
17:00 - 19:00		2.00	CIRC	1	PUMP 18 PPG PILL @ 5 BBLS EVERY 10 MIN
19:00 - 23:30		4.50	BOP	1	NIPPLE DOWN BOPE LIFT STACK SET SLIPS @ 225 K CUT OFF CASING
23:30 - 01:00		1.50	OTH		PREPARE FLOOR TO LDDP IN MOUSE HOLE
7/27/2008	01:00 - 06:00	5.00	TRP	3	LDDP
	06:00 - 14:00	8.00	TRP	5	LDDP - IN MOUSE HOLE // BUILD 18# PILL PUMPED 30 BBLS IN ANNULAS SHUT IN WELL
	14:00 - 14:30	0.50	RIG	2	RIG SERVICE TOP DRIVE LOST COMMUNICATION CORD ???
8/3/2008	14:30 - 00:00	9.50	TRP	3	LDDP BHA IN MOUSE HOLE
	00:00 - 06:00	6.00	LOC	7	CLEAN MUD TANKS RIG RELEASED @0600
	06:00 - 12:30	6.50	WCL	2	AUG 3/2008 MONITORING PRESSURE ON C SECTION 7750PSI & B SECTION 5200PSI
	12:30 - 13:30	1.00	WCL	2	R/U CHOKE AND LINE TO PIT FROM C SECTION
	13:30 - 16:00	2.50	WCL	2	BLEED PRESSURE OFF C SECTION 0PSI & B SECTION 0PSI & CAMRON TIGHTEN UP GLAND NUT PACKING ON A SECTION
	16:00 - 17:00	1.00	WCL	2	R/D IPS CHOKE & LINE, R/U JRH CHOKE MANIFOLD AND LINE
	17:00 - 06:00	13.00	WHD	1	VENTING PRESSURE THROUGH CHOKE MANIFOLD & MONITORING WELL @ 20PSI
	06:00 - 13:30	7.50	WCL	2	AUG. 4/2008 VENTING PRESSURE THROUGH CHOKE MANIFOLD & MONITORING WELL @ 20PSI
	13:30 - 14:30	1.00	LOG	2	R/U OIL WELL PERFORATION WIRE LINE & LUBRICATOR & HIGH DESERT TEST LINE TO TUBING HEAD
	14:30 - 19:30	5.00	LOG	2	M/U CBL/GAMMA RAY/COLLAR LOCATOR & RIH TO 16,654 LOG UP TO 16,350 AND RUN BACK TO BOTTOM, PRESSURE UP CASING TO 4,000PSI, LOG UP F/16,654 TO 3,900 AND R/D WIRE LINE
	19:30 - 06:00	10.50	WCL	2	VENTING PRESSURE THROUGH CHOKE MANIFOLD & MONITORING WELL @ 20PSI
	06:00 - 08:00	2.00	WCL	2	AUG. 5/2008 VENTING PRESSURE THROUGH CHOKE MANIFOLD & MONITORING WELL @ 20PSI
	08:00 - 14:30	6.50	WCL	2	CAMRON TEST B SECTION TO 5,200PSI & C SECTION TO 7,500PSI HOLD FOR 1HR.
	14:30 - 06:00	15.50	WHD	1	VENTING PRESSURE THROUGH CHOKE MANIFOLD & MONITORING WELL @ 20PSI

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Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name: SST

Spud Date: 4/12/2008
 Rig Release: 7/27/2008
 Rig Number: 66

Date	From - To	Hours	Code	Sub Code	Description of Operations
8/3/2008	06:00 - 23:00	17.00	WCL	2	AUG. 6/2008 VENTING PRESSURE THROUGH CHOKE MANIFOLD & MONTORING WELL @ 20PSI
	23:00 - 12:30	13.50	CMT	1	PJSM & R/U HALLIBURTON ON C SECTION TO SET PLUG BEWEEN 4 1/2" CASING & 7" CASING
	12:30 - 02:30	14.00	CMT	2	TEST LINE TO 1,000PSI & MIX & PUMP 50BBLS CEMENT @ 15.8PPG, PUMP @ 1.5BPM, PUMP 17BBLS OF FRESH WATER AND WASH OUT CHOKE MANIFOLD, LINE, CLOSE WING VALVE PRESSURE UP CASING TO 250PSI AND DROP BACK TO 0PSI CLOSE IN WELL
	02:30 - 06:00	3.50	WOT	1	WAIT ON CEMENT AND MONTOR PRESSURE 0PSI

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Operations Summary Report - COMPLETION

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name:

Spud Date: 4/12/2008
 Rig Release:
 Rig Number:

Date	From - To	Hours	Code	Sub Code	Description of Operations
8/8/2008	07:00 - 17:00	10.00	LOG	2	MIRU HES ELU. MU AND RIH WITH GR/SONIC/NEUTRON LOGGING TOOLS AND TAG CORRELATED PBDT AT 16,636'. LOG FROM PBDT TO 11,400' WITH 0 PSI. RDMO HES ELU.
	17:00 - 20:00	3.00	OTH		NU 4 1/16" FRAC TREE. MIRU IPS PUMP TRUCK. TEST CSG& FRAC TREE TO 10,000 PSI & ANNULUS TO 3,000 PSI. BOTH TESTS GOOD. SET ANCHORS FOR CTU.
8/9/2008	07:00 - 11:00	4.00	PERF	2	MIRU OWP ELU. MU & RIH WITH 2.5" GUNS. SHOOT 18 HOLES FROM 16,576' TO 16,597'. 1,500 PSI WHEN GUNS WERE FIRED. 1,189 PSI WITH GUNS AT SURFACE.
	11:00 - 13:00	2.00	STIM	1	MIRU HES EQUIPMENT AND PUMP 10 BBLS BREAK DOWN TEST. OPEN WELL W/ 784 PSI. BREAK PERFS DOWN @ 8.0 BPM & 8,260 PSI. PUMPED 8.0 BPM @ 7,900 PSI INTO PERFS. ISIP= 7,080 PSI. 5 MIN= 6,460 PSI. 10 MIN= 6,343 PSI. 15 MIN= 6,288. PUMPED A TOTAL OF 18 BBLS.
	13:00 - 06:00	17.00	PTST	2	OPEN WELL UP WITH 6,500 PSI ON 12/64" CHOKE. WENT TO 0 PSI IN 10 MINUTES WITH A SLIGHT FLOW. RECOVERED A TOTAL OF 16 BBLS. SHUT IN FOR PRESSURE BUILD UP.
8/11/2008	06:00 - 09:00	3.00	PERF	2	PERF STG #1B WITH 7- 1' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE & 0 PSI. SHOOT 21 HOLES FROM 16,126' TO 16,549'.
	09:00 - 10:00	1.00	STIM	3	FRAC STAGE #1A & 1B WITH 1,122 BBLS 35# HYBOR-G CARRYING 37,127 LBS# 30/60 SINTERLITE SAND. AVG RATE= 38.3 BPM. AVG PSI= 10,697.
	10:00 - 12:45	2.75	PERF	2	PERF STG #2 WITH 2- 1', 7- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 15,800' WITH 7,000 PSI. SHOOT 48 HOLES FROM 15,308' TO 15,762'.
	12:45 - 14:15	1.50	STIM	3	FRAC STAGE #2 WITH 800 GAL. 15% HCL AT 10 BPM, 3,111 BBLS SLICKWATER CARRYING 60,553 LBS# 30/60 ECONOPROP SAND. AVG RATE= 42.0 BPM. AVG PSI= 9,837.
	14:15 - 17:30	3.25	PERF	2	PERF STG #3 WITH 6- 1' & 5- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CBP AT 15,200' WITH 8,000 PSI. SHOOT 48 HOLES FROM 14,502' TO 15,171'.
	17:30 - 18:30	1.00	STIM	3	FRAC STAGE #3 WITH 800 GAL. 15% HCL AT 10 BPM, 1,767 BBLS SLICKWATER CARRYING 22,889 LBS# 30/60 ECONOPROP SAND. AVG RATE= 38.4 BPM. AVG PSI= 10,102
	18:30 - 21:00	2.50	PERF	2	PERF STG #4 WITH 8- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 14,300' WITH 7,900 PSI. SHOOT 48 HOLES FROM 13,826' TO 14,260'.
	21:00 - 06:00	9.00			SDFN
8/12/2008	06:00 - 07:45	1.75	STIM	3	FRAC STAGE #4 WITH 800 GAL. 15% HCL AT 10 BPM, 2,547 BBLS SLICKWATER CARRYING 44,754 LBS# 30/50 SB EXCEL & 30/60 ECONOPROP SAND. AVG RATE= 43.5 BPM. AVG PSI= 9,345.
	07:45 - 11:50	4.08	PERF	2	PERF STG #5 WITH 1- 4', 1- 12' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CBP AT 13,700' WITH 7,200 PSI. SHOOT 48 HOLES FROM 13,556' TO 13,661'.
	11:50 - 13:00	1.17	STIM	3	FRAC STAGE #5 WITH 800 GAL. 15% HCL AT 10 BPM, 2,437 BBLS SLICKWATER CARRYING 39,267 LBS# 30/60 ECONOPROP/SINTERLITE/SB EXCEL SAND. AVG RATE= 44.1 BPM. AVG PSI= 8,735.
	13:00 - 15:30	2.50	PERF	2	PERF STG #6 WITH 8- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 12,820' WITH 7,000 PSI. SHOOT 48 HOLES FROM 12,393' TO 12,784'.
	15:30 - 16:30	1.00	STIM	3	FRAC STAGE #6 WITH 800 GAL. 15% HCL AT 10 BPM, 2,518 BBLS SLICKWATER CARRYING 44,648 LBS# 30/50 SB EXCEL SAND. AVG RATE= 43.5 BPM. AVG PSI= 7,782.
	16:30 - 18:30	2.00	PERF	2	PERF STG #7 WITH 1- 2', 7- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CBP AT 12,230' WITH 5,700 PSI. SHOOT 48 HOLES FROM

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DIV. OF OIL, GAS & MINING

Operations Summary Report

Well Name: WV 7BD-23-8-21
 Location: 23- 8-S 21-E 26
 Rig Name:

Spud Date: 4/12/2008
 Rig Release:
 Rig Number:

Date	From - To	Hours	Code	Sub Code	Description of Operations
8/12/2008	16:30 - 18:30	2.00	PERF	2	11,842' TO 12,176'.
	18:30 - 19:45	1.25	STIM	3	FRAC STAGE #7 WITH 800 GAL. 15% HCL AT 10 BPM, 2,446 BBLs SLICKWATER CARRYING 39,739 LBS# 30/50 SB EXCEL SAND. AVG RATE= 45.9 BPM. AVG PSI= 6,872.
8/13/2008	19:45 - 06:00	10.25			SDFN
	06:00 - 08:00	2.00	PERF	2	PERF STG #8 WITH 6- 2', 1- 4' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 10,700' WITH 4,800 PSI. SHOOT 48 HOLES FROM 10,504' TO 10,640'.
	08:00 - 09:00	1.00	STIM	3	FRAC STAGE #8 WITH 800 GAL. 15% HCL AT 10 BPM, 2,861 BBLs SLICKWATER CARRYING 68,671 LBS# 30/50 SB EXCEL SAND. AVG RATE= 52.7 BPM. AVG PSI= 6,772.
	09:00 - 11:00	2.00	PERF	2	PERF STG #9 WITH 3- 4', 1- 2' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 9,780' WITH 3,700 PSI. SHOOT 42 HOLES FROM 9,076' TO 9,724'.
	11:00 - 12:15	1.25	STIM	3	FRAC STAGE #9 WITH 800 GAL. 15% HCL AT 10 BPM, 2,913 BBLs SLICKWATER CARRYING 70,438 LBS# 30/50 SB EXCEL SAND. AVG RATE= 52.9 BPM. AVG PSI= 5,398.
	12:15 - 13:45	1.50	PERF	2	PERF STG #10 WITH 4- 4' GUN LOADED 3 SPF, 120° PHASE, 11 GRAM CHARGE. SET 3.44" CFP AT 7,600' WITH 3,000 PSI. SHOOT 48 HOLES FROM 7,030' TO 7,572'.
	13:45 - 15:30	1.75	STIM	3	FRAC STAGE #10 WITH 800 GAL. 15% HCL AT 10 BPM, 939 BBLs DELTA-200 CARRYING 67,581 LBS# 30/50 SB EXCEL SAND. AVG RATE= 45.0 BPM. AVG PSI= 4,798.
	15:30 - 16:30 16:30 - 19:00	1.00 2.50	LOC LOC	4 4	RDMO HES & OWP ELU. MIRU IPS CTU, GCDOE AND SPIRIT FLUIDS. MU QES 2 7/8" MOTOR/JARS AND 3.55" 5-BLADE JUNK MILL. TEST STACK TO 8,000 PSI, SDFN
8/14/2008	06:00 - 20:00	14.00	DRL	6	WITH IPS CTU, GCDOE, SPIRIT FLUIDS RIGGED UP. MU QES 2 7/8" MOTOR/JARS AND 3.55" 5-BLADE JUNK MILL. TEST STACK TO 8,000 PSI. RIH AND DRILLOUT 9 PLUGS IN 8 HOURS TO PBTD DEPTH OF 16,658'. PUMP FINAL SWEEP AND POOH. RDMO IPS CTU, GCDOE & SPIRIT FLUIDS.
8/15/2008	20:00 - 06:00	10.00	PTST	2	FLOWING TO SALES THROUGH IPS FBE.
8/15/2008	06:00 - 06:00	24.00	PTST	2	FLOWING TO SALES THROUGH IPS FBE.
8/16/2008	06:00 - 06:00	24.00	PTST	2	FLOWING TO SALES THROUGH IPS FBE.
8/17/2008	06:00 - 06:00	24.00	PTST	2	FLOWING TO SALES THROUGH IPS FBE.
8/18/2008	06:00 - 06:00	24.00	PTST	2	RDMO IPS FBE. FLOWING TO SALES THROUGH PRODUCTION EQUIPMENT.

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UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

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

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 Deepen Plug Back Diff. Resvr.
 Other: _____

2. Name of Operator
 QUESTAR EXPLORATION & PRODUCTION CO.

3. Address
 11002 EAST 17500 SOUTH, VERNAL, UT 84078

3a. Phone No. (include area code)
 435.781.4342 Dahn Caldwell

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface 1418' FNL, 2559' FEL, SWNE, SEC 23-T8S-R21E

1418' FNL, 2559' FEL, SWNE, SEC 23-T8S-R21E

At top prod. interval reported below

At total depth 1418' FNL, 2559' FEL, SWNE, SEC 23-T8S-R21E

14. Date Spudded
 04/12/2008

15. Date T.D. Reached
 07/22/2008

16. Date Completed 08/14/2008
 D & A Ready to Prod.

17. Elevations (DF, RKB, RT, GL)*
 4880' KB

18. Total Depth: MD 16,669'
 TVD

19. Plug Back T.D.: MD 16,657'
 TVD

20. Depth Bridge Plug Set: MD
 TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
 CEMENT BOND/GR/CCL/TEMP, ARRAY COMP TR & DSN, SD

22. Was well cored? No Yes (Submit analysis)
 Was DST run? No Yes (Submit report)
 Directional Survey? No Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17-1/2"	13-3/8"	54.5#		538'		500 SXS		SURF - CIRC	
12-1/4"	9-5/8"	47#		4518'		1,740 SXS		SURF - CIRC	
8-1/2"	7"	26 & 29#		11761'		2,504 SXS			
6-1/8"	4-1/2"	15.1 16.6		16659'		800 SXS		SURF - LOG	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
N/A					N/A			

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) See Attached Report			See Attached Report			
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
See Attached Report	See Attached Report

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
8/14/08	8/18/08	24	→	21	3592	997			FLOWING
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
28/64	SI	N/A	1550	→					PRODUCING

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
	SI		→						

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DIV. OF OIL, GAS & MINING

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*(See instructions and spaces for additional data on page 2)

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER	2570'			MANCOS 'B'	12644'
MAHOAGANY	3338'			FRONTIER	15334'
WASATCH	5910'			DAKOTA SILT	16220'
MESA VERDE	9051'			DAKOTA	16421'
CASTLEGATE	11431'			TD	16669'
BLACKHAWK	11759'				
MANCOS	12203'				

32. Additional remarks (include plugging procedure):

THE FORMATION TOPS FROM OUR GEOLOGIST.

TOC @ 4070'

FUTURE PROSPECTS ARE:

GREEN RIVER
MAHOAGANY

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- Electrical/Mechanical Logs (1 full set req'd.)
 Geologic Report
 DST Report
 Directional Survey
 Sundry Notice for plugging and cement verification
 Core Analysis
 Other: PERFORATION & FRACING REPORT

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) JIM SIMONTON Title COMPLETION SUPERVISOR
 Signature *Jim Simonton (Hc)* Date 10/27/2008

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.

**WV 7BD 23 8 21 – ATTACHMENT ONE
PERFORATION DETAIL:**

Open Perfs	Stimulation					Perf Status
7030' – 7034'	Frac w/	67,581	Lbs in	39,438	Gals	Open – Wasatch
7046' – 7050'						Open – Wasatch
7220' – 7224'						Open – Wasatch
7568' – 7572'						Open – Wasatch
						Open – Mesa Verde
9076' – 9080'	Frac w/	70,438	Lbs in	122,346	Gals	Open – Mesa Verde
9186' – 9190'						Open – Mesa Verde
9710' – 9714'						Open – Mesa Verde
9722' – 9724'						Open – Mesa Verde
						Open – Mesa Verde
10504' – 10508'	Frac w/	68,671	Lbs in	120,162	Gals	Open – Mesa Verde
10523' – 10525'						Open – Mesa Verde
10542' – 10544'						Open – Mesa Verde
10562' – 10564'						Open – Mesa Verde
10589' – 10591'						Open – Mesa Verde
10633' – 10635'						Open – Mesa Verde
10638' – 10640'						Open – Mesa Verde
11842' – 11844'	Frac w/	39,739	Lbs in	102,732	Gals	Open - Blackhawk
11906' – 11908'						Open - Blackhawk
11912' – 11914'						Open - Blackhawk
11945' – 11946'						Open - Blackhawk
11950' – 11951'						Open - Blackhawk
11999' – 12001'						Open - Blackhawk
12030' – 12032'						Open - Blackhawk
12070' – 12072'						Open - Blackhawk
12174' – 12176'	Open - Blackhawk					
12393' – 12395'	Frac w/	44,648	Lbs in	105,756	Gals	Open – Mancos
12406' – 12408'						Open – Mancos
12499' – 12501'						Open – Mancos
12646' – 12648'						Open – Mancos 'B'
12666' – 12668'						Open – Mancos 'B'
12673' – 12675'						Open – Mancos 'B'
12748' – 12750'						Open – Mancos 'B'
12782' – 12784'	Open – Mancos 'B'					
13556' – 13560'	Frac w/	39,267	Lbs in	102,354	Gals	Open - Mancos
13649' – 13661'						Open - Mancos

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13826' – 13828'							Open - Mancos
13844' – 13846'							Open - Mancos
13871' – 13873'							Open - Mancos
13928' – 13930'							Open - Mancos
13956' – 13958'	Frac w/	44,754	Lbs in	106,974	Gals		Open - Mancos
13971' – 13973'							Open - Mancos
14022' – 14024'							Open - Mancos
14258' – 14260'							Open - Mancos
14502' – 14503'							Open - Mancos
14552' – 14553'							Open - Mancos
14561' – 14562'							Open - Mancos
14636' – 14638'							Open - Mancos
14686' – 14687'							Open - Mancos
14790' – 14792'	Frac w/	22,889	Lbs in	74,214	Gals		Open - Mancos
14812' – 14814'							Open - Frontier
14897' – 14898'							Open - Frontier
14912' – 14914'							Open - Frontier
14966' – 14968'							Open - Frontier
15170' – 15171'							Open - Frontier
15308' – 15310'							Open - Frontier
15336' – 15338'							Open - Frontier
15355' – 15356'							Open - Frontier
15376' – 15378'							Open - Frontier
15386' – 15388'	Frac w/	60,553	Lbs in	130,662	Gals		Open - Frontier
15398' – 15400'							Open - Frontier
15561' – 15562'							Open - Dakota Silt
15614' – 15616'							Open - Dakota Silt
15760' – 15762'							Open - Dakota
							Open - Dakota
Stage 1-B							
16126' – 16127'							Open - Dakota
16204' – 16205'							Open - Dakota
16242' – 16243'							Open - Dakota
16326' – 16327'							Open - Dakota
16430' – 16431'							Open - Dakota
16535' – 16536'							Open - Dakota
16548' – 16549'	Frac w/	37,127	Lbs in	47,124	Gals		Open - Dakota
Stage 1-A							
16576' – 16577'							Open - Dakota
16578' – 16579'							Open - Dakota
16584' – 16585'							Open - Dakota
16586' – 16587'							Open - Dakota
16593' – 16594'							Open - Dakota
16596' – 16597'							Open - Dakota

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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					

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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

DAHN CALDWELL
Dahn Caldwell
 Office Admin 1/20/09

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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-0809**

6. If Indian, Allottee or Tribe Name
UTE TRIBE

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
QUESTAR EXPLORATION & PRODUCTION CO. CONTACT: Mike Stahl

3a. Address
11002 EAST 17500 SOUTH, VERNAL, UTAH 84078

3b. Phone No. (include area code)
(303) 308-3613

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1418' FNL 2559' FEL, SWNE, SECTION 23, T8S, R21E

7. If Unit of CA/Agreement, Name and/or No.
WONSITS VALLEY UNIT

8. Well Name and No.
WV 7BD-23-8-21

9. API Well No.
43-047-39044

10. Field and Pool or Exploratory Area
WONSITS VALLEY

11. Country or Parish, State
UINTAH, UTAH

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 COMMINGLING
	<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 7BD-23-8-21. 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 - 11.5% ; Dakota Slit - 3.1% ; Frontier - 9.5% ; Mancos - 29.9% ; Mancos B - 6.3% ; Black Hawk - 10.2% ; Mesa Verde - 19.3% ; Wasatch - 10.2%.

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)
Laura Bills Title **Associate Regulatory Affairs Analyst**

Signature *Laura Bills* Date **03/12/2009**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *D. M. Hunt* Title **Pet-Eng.** Date **4/13/09**

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 **DOG** Federal Approval Of This Action Is Necessary

RECEIVED

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.

MAR 16 2009

(Instructions on page 2)

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 17th Street, Suite 500
Denver, CO 80265

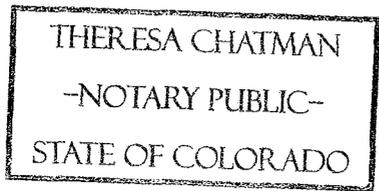
- 2. In my capacity as a Landman, pursuant to the provisions of Utah Administrative Rule 649-3-22, I have provided a copy of Questar Exploration and Production Company's application for completion of the WV 7BD-23-8-21 well into two or more pools, in the form of Utah Division of Oil, Gas and Mining's 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 4th day of March 2009.

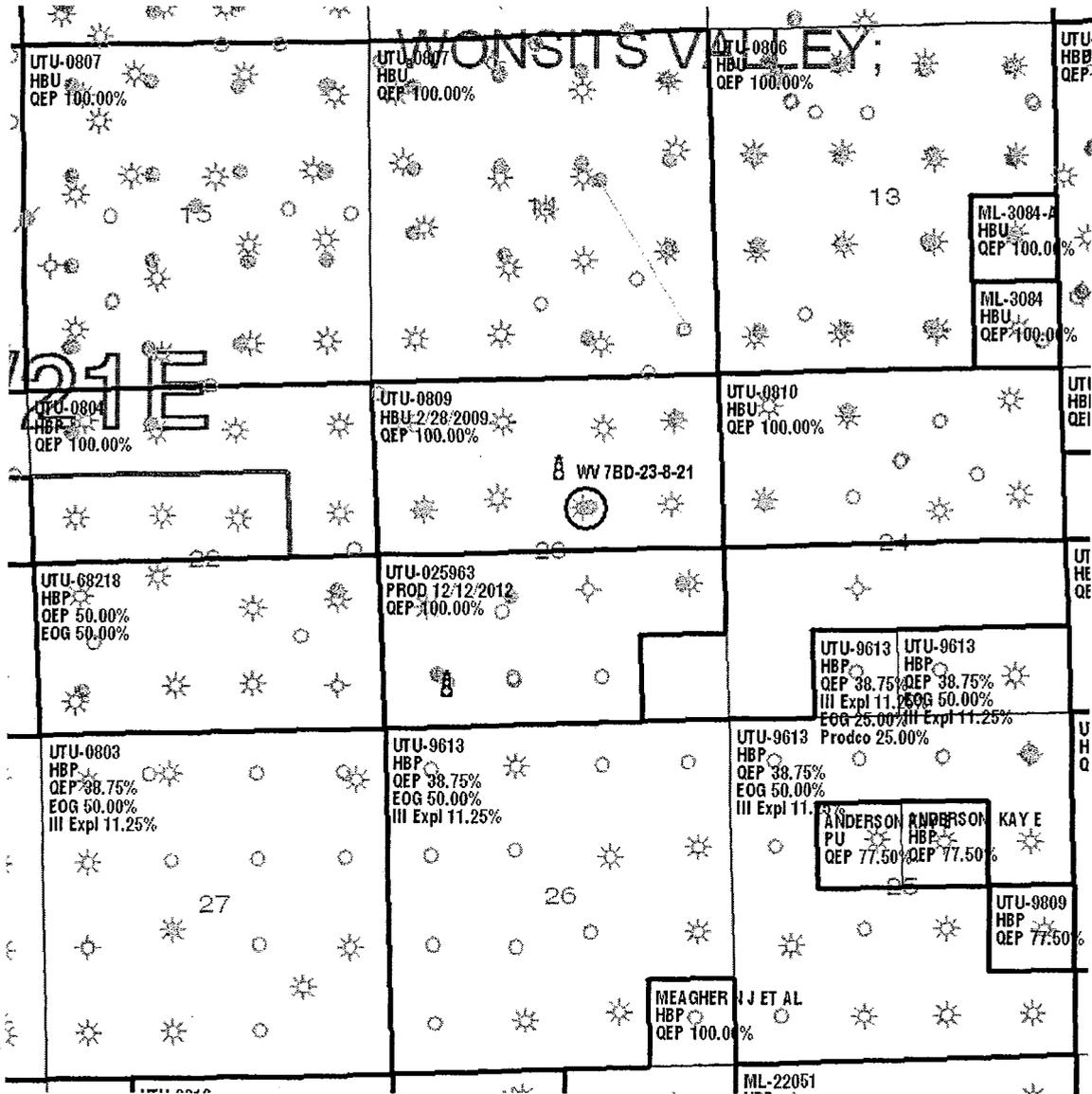
Nathan C. Koeniger
Printed Name: Nathan C. Koeniger

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

Theresa Chatman
Notary Public

MY COMMISSION EXPIRES: 7/7/11





T8S-R21E

○ Commingled well

<p>Tw/Kmv COMMINGLED PRODUCTION Uinta Basin—Uintah County, Utah</p>				
<p>Well: WV 7BD-23-8-21 Lease: UTU 0809</p>				
<p>QUESTAR Exploration and Production</p> <p><small>1050 17th St., # 500 Denver, CO 80265</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Geologist:</td> </tr> <tr> <td style="padding: 2px;">Landman: Chad Matney</td> </tr> <tr> <td style="padding: 2px;">Date: September 16, 2008</td> </tr> </table>	Geologist:	Landman: Chad Matney	Date: September 16, 2008
Geologist:				
Landman: Chad Matney				
Date: September 16, 2008				

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

FROM: (Old Operator): N5085-Questar Exploration and Production Company 1050 17th St, Suite 500 Denver, CO 80265 Phone: 1 (303) 308-3048	TO: (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

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
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.

7. UNIT or CA AGREEMENT NAME:
See attached

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

8. WELL NAME and NUMBER:
See attached

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

9. API NUMBER:
Attached

3. ADDRESS OF OPERATOR:
1050 17th Street, Suite 500 Denver, STATE CO ZIP 80265

PHONE NUMBER:
(303) 672-6900

10. FIELD AND POOL, OR WILDCAT:
See attached

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

COUNTY: Attached
STATE: UTAH

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

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 6/13/2010
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	twp	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 & MINERAL