



September 22, 2000

State of Utah DOGM  
1594 West North Temple, Suite #1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

Attention: Lisha Cordova

Enclosed is the original and one copy (each) of the Application for Permit to Drill for the locations listed below:

✓NBU #361    NBU #345    ✓NBU #358  
✓NBU #367    ✓NBU #359    ✓NBU #347

Please contact me as soon as possible in order to schedule an on-site.

If you have any questions or need additional information, please do not hesitate to call me, (435)-781-7023.

Sincerely,  
  
Cheryl Cameron  
Sr. Regulatory Analyst

CC: SU/WF

RECEIVED  
SEP 27 2000  
STATE OF UTAH  
OIL, GAS & MINERAL IND

**Coastal Oil & Gas Corporation**

A SUBSIDIARY OF THE COASTAL CORPORATION  
1368 S 1200 E • P O BOX 1148 • VERNAL UT 84078 • 435/789-4433 • FAX 435/789-4436

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial Number:

U-01197-A-ST

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

6. If Indian, Allottee or Tribe Name:

1A. Type of Work

DRILL

DEEPEN

7. Unit Agreement Name:

Natural Buttes Unit

B. Type of Well

OIL

GAS

OTHER:

SINGLE ZONE

MULTIPLE ZONE

8. Farm or Lease Name:

Natural Buttes

2. Name of Operator:

Coastal Oil & Gas Corporation

9. Well Number:

#347

3. Address and Telephone Number:

P.O. Box 1148, Vernal UT 84078

(435) 781-7023

10. Field and Pool, or Wildcat

Natural Buttes

4. Location of Well (Footages)

At surface: 1697' FSL & 411' FWL

4424 426 N  
635418 E

At proposed proding zone:

11. Qtr/Qtr, Section, Township, Range, Meridian:

NW/SW Sec. 11, T10S, R22E

14. Distance in miles and direction from nearest town or post office:

28.3 Miles north of Ouray, UT

12. County

Uintah

13. State:

UT

15. Distance to nearest property or lease line (feet):

411'

16. Number of acres in lease:

1674.49

17. Number of acres assigned to this well:

40

18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet):

Refer to Topo C

19. Proposed Depth:

9150'

20. Rotary or cable tools:

Rotary

21. Elevations (show whether DR, RT, GR, etc.):

5128.1' Ungraded

22. Approximate date work will start:

Upon Approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8 5/8"	32#	2000'	520 sx
7 7/8"	4 1/2"	11.6#	9150'	2130 sx

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

Coastal Oil & Gas Corporation is considered to be the operator of the subject well. Coastal Oil & Gas Corporation agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for the lease activities is being provided by Coastal Oil & Gas Corporation Nationwide Bond #U-605382-9.

This location is not within 460 feet from the boundary of the Natural Buttes Unit, nor is it within 460 feet of any non-committed tract lying within the boundaries of the Unit.

24. Name & Signature: Cheryl Cameron Title: Senior Regulatory Analyst Date: 9/18/00

(This space for State use only)

API Number Assigned: 43047-33709

Approval:

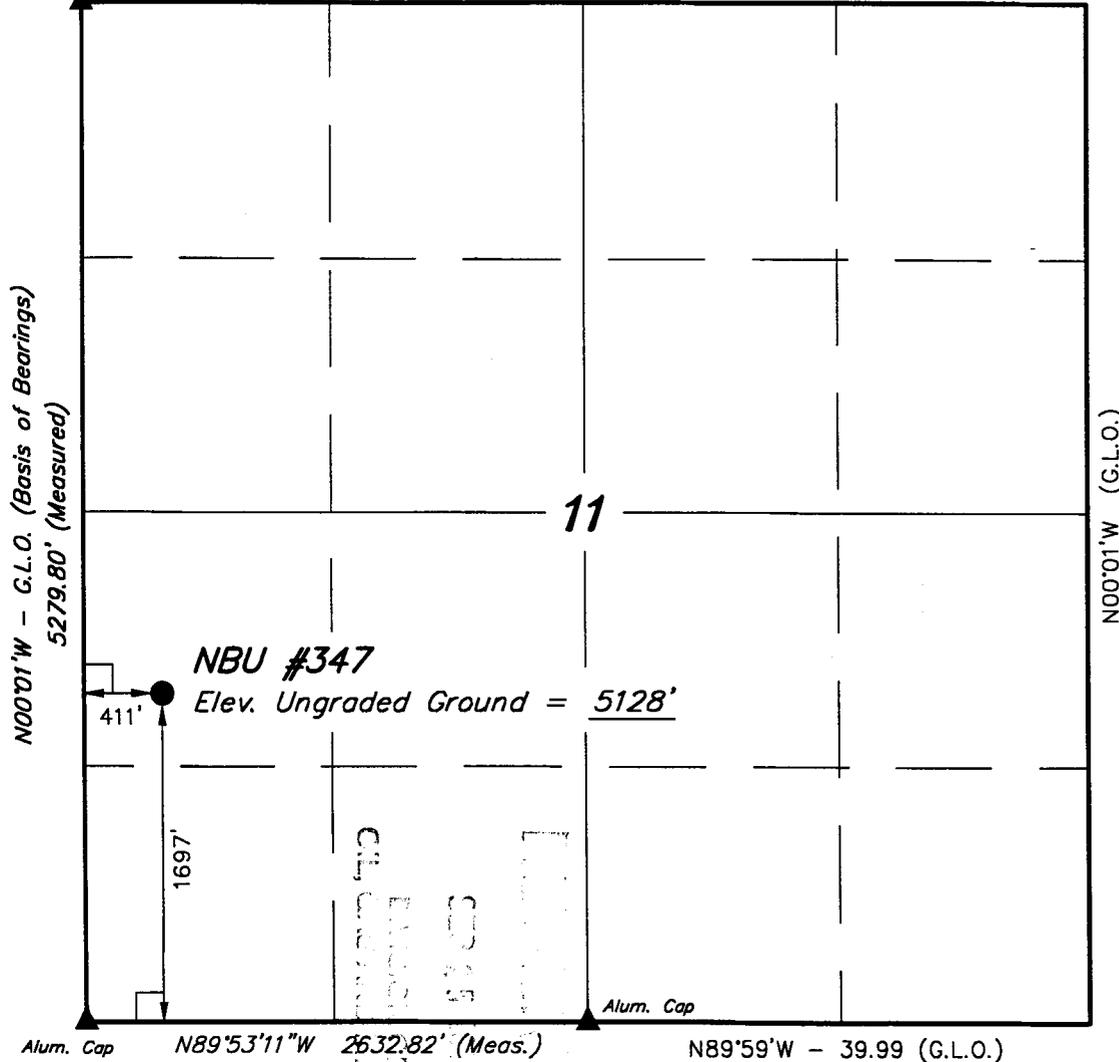
Approved by the  
Division of  
Oil and Mining  
Date: 11/13/00  
By: [Signature]

(See Instructions on Reverse Side)

# T10S, R22E S.L.B.&M.

1991 Gov't Alum.  
Cap, Steel Fence  
Post, Pile of Stones

S89°59'W - 80.04 (G.L.O.)

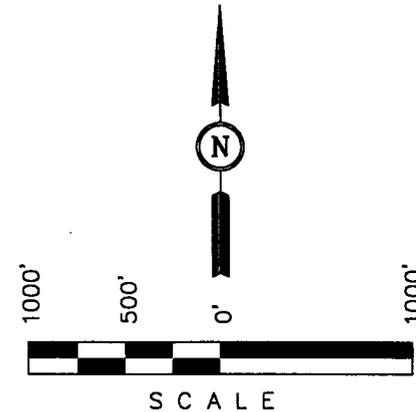


## COASTAL OIL & GAS CORP.

Well location, NBU #347, located as shown in the NW 1/4 SW 1/4 of Section 11, T10S, R22E, S.L.B.&M., Uintah County, Utah.

### BASIS OF ELEVATION

TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 11, T10S, R22E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN. NE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.



### CERTIFICATE

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

No. 161319  
*Robert Kay*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

### LEGEND:

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

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

SCALE 1" = 1000'	DATE SURVEYED: 10-13-98	DATE DRAWN: 10-15-98
PARTY D.A. C.G. C.B.T.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE COASTAL OIL & GAS CORP.	

**NBU #347  
NW/SW Sec. 11, T10S-R22E  
Uintah County, UT  
U-01197-A-ST**

**ONSHORE ORDER NO. 1  
COASTAL OIL & GAS CORPORATION**

***DRILLING PROGRAM***

**1. Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
KB	5140'
Green River	1055'
Wasatch	4125'
Mesaverde	6375'
Castlegate A	8540
Total Depth	8650'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1055'
Gas	Wasatch	4125'
Gas	Mesaverde	6375'
	Castlegate A	8540'
Water	N/A	
Other Minerals	N/A	
Total Depth		8650'

**3. Pressure Control Equipment (Schematic Attached)**

The BOP stack will consist of one 11" 3,000 psi annular BOP, one 11" 3,000 psi double ram, and one 11' drilling spool. The lower ram will contain pipe rams, and the upper ram will contain blind rams.

The choke and kill lines and the choke manifold will have a 3,000 psi minimum pressure rating.

The hydrill will be tested to 1,500 psi. The rams, choke manifold, kelly safety valves, drill string safety valves, and inside BOP will be tested to 3,000 psi.

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

Refer to the attached Cement & Casing Program.

5. **Drilling Fluids Program:**

Refer to the attached Mud Program.

6. **Evaluation Program:** (Logging)

<u>Depth</u>	<u>Log Type</u>
SC-TD	Platform Express with Sonic

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated @ 8650' TD approximately equals 3,460 psi (calculated at 0.4 psi/foot).

Maximum anticipated surface pressure equals approximately 1,557psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

NBU #347  
NW/SW Sec. 11, T10S-R22E  
Uintah County, UT  
U-01197-A-ST

ONSHORE ORDER NO. 1

***MULTI-POINT SURFACE USE & OPERATIONS PLAN***

1. **Existing Roads:**

Refer to Topo Map A for directions to the location.

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

To reach the NBU #347 location proceed in a westerly direction from Vernal, Utah along U.S. Highway 40 approximately 14.0 miles to the junction of State Hwy 88; exit left and proceed in a southerly direction approximately 17.0 miles to Ouray, Utah; proceed in a southerly direction approximately 11.5 miles on the Seep Ridge Road to the junction of this road and an existing road to the east; turn left and proceed in a southeasterly direction approximately 12.0 miles to the junction of this road and an existing road to the south; turn right and proceed in a southerly direction approximately 0.6 miles to the junction of this road and an existing road to the southeast; turn left and proceed in a southeasterly direction approximately 1.4 miles to the junction of this road and an existing road to the north; proceed in a northerly direction approximately 2.8 miles to the junction of this road to the west; turn left and proceed in a westerly, then northwesterly direction approximately 0.2 miles to the beginning of the proposed access road to the southwest; follow road flags in a southwesterly direction approximately 100' to the proposed location.

Total distance to Vernal is approximately 59.5 miles.

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

***Improvements to existing access roads shall be determined at the on-site inspection.***

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. **Planned Access Roads:**

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

The upgraded and new portions of the access road will be crowned and ditched with a running surface of 18 feet and a maximum disturbed width of 30 feet, ***unless modified at the on-site inspection.*** Appropriate water control will be installed to control erosion.

***Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities shall be determined at the on-site.***

The access road was centerline flagged during time of staking.

Surfacing material may be necessary, depending upon weather conditions.

Surface disturbance and vehicular traffic will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

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

Please refer to Topo Map C.

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

*The following guidelines will apply if the well is productive.*

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required color is Desert Brown, Munsell standard color number 10 YR 6/3.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

The proposed pipeline will leave the wellpad in a northeasterly direction for an approximate distance of 75'. Refer to Topo D.

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

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32, T4S, R3E, Water User Claim #43-8496, Application #53617.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

6. **Source of Construction Materials:**

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

Any gravel will be obtained from a commercial source.

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

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

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids. ***The need for a reserve pit liner will be determined at the on-site inspection.***

If a plastic reinforced liner is used, it will be a minimum of 12 mil thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

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

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

8. **Ancillary Facilities:**

None are anticipated.

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). ***This section is subject to modification as a result of the on-site inspection.***

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

If it is determined that a pit liner will be used at the on-site inspection, the reserve pit will be lined, and when the reserve pit is closed, the pit liner will be buried below plow depth.

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

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

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

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

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

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

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

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

*Producing Location:*

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

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

If a plastic, nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water (s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

*Dry Hole/Abandoned Location:*

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

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

11. **Surface Ownership:**

State of Utah  
SITLA  
675 East 500 South  
Salt Lake City, UT 84102-2818

12. **Other Information:**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

A Class III archaeological survey has been conducted. A copy of this report is attached.

**13. Lessee's or Operators's Representative & Certification:**

Cheryl Cameron  
Senior Regulatory Analyst  
Coastal Oil & Gas Corporation  
P.O. Box 1148  
Vernal, UT 84078  
(435) 781-7023

Tom Young  
Drilling Manager  
Coastal Oil & Gas Corporation  
9 Greenway Plaza, Suite 2770  
Houston, TX 77046  
(713) 418-4156

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

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

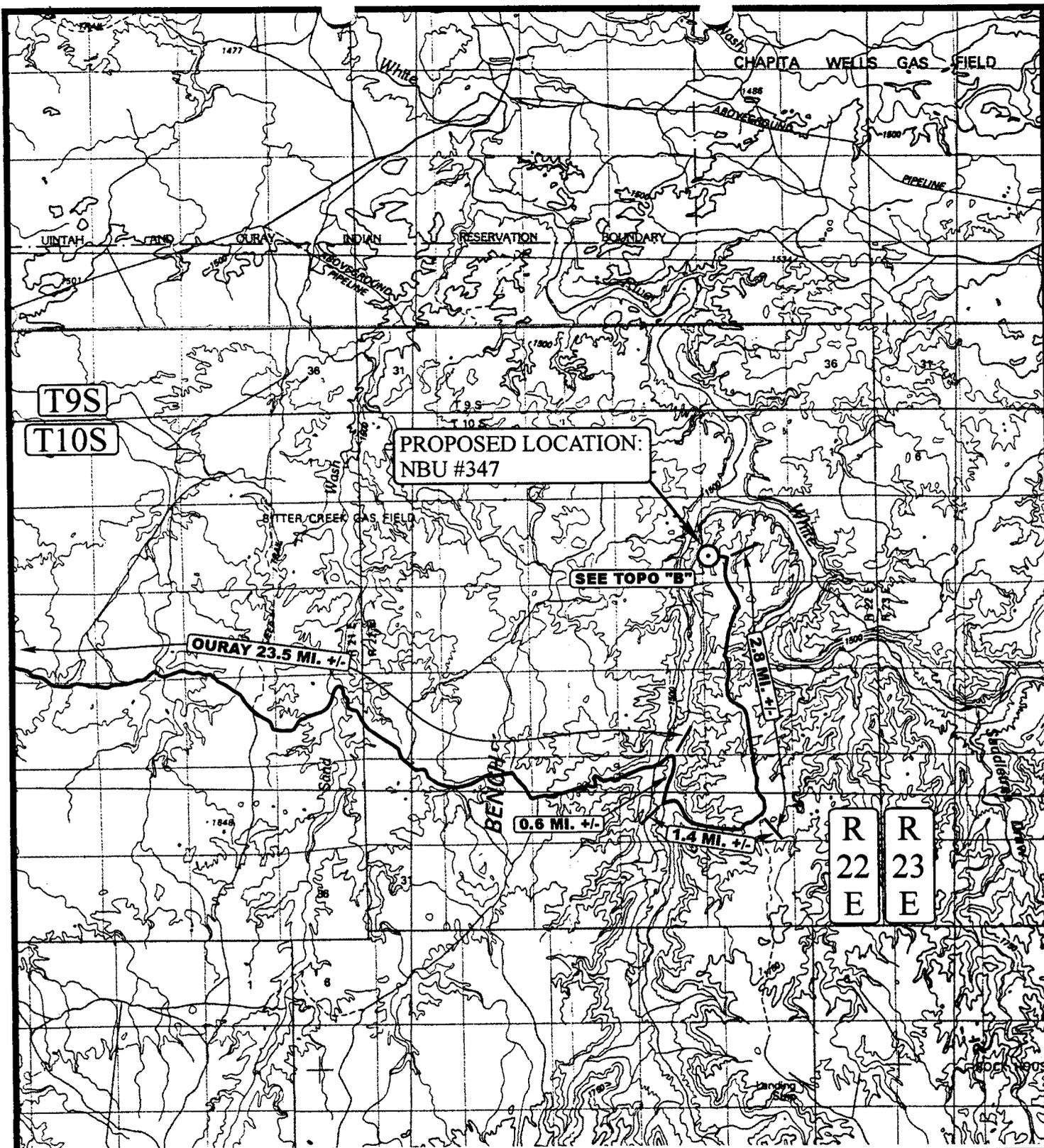
Coastal Oil & Gas Corporation is considered to be the operator of the subject well. Coastal Oil & Gas Corporation agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Coastal Oil & Gas Corporation Bond #102103.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
Cheryl Cameron

9/18/00  
Date



**LEGEND:**

⊙ PROPOSED LOCATION



**COASTAL OIL & GAS CORP.**

NBU #347  
SECTION 11, T10S, R22E, S.L.B.&M.  
1697' FSL 411' FWL



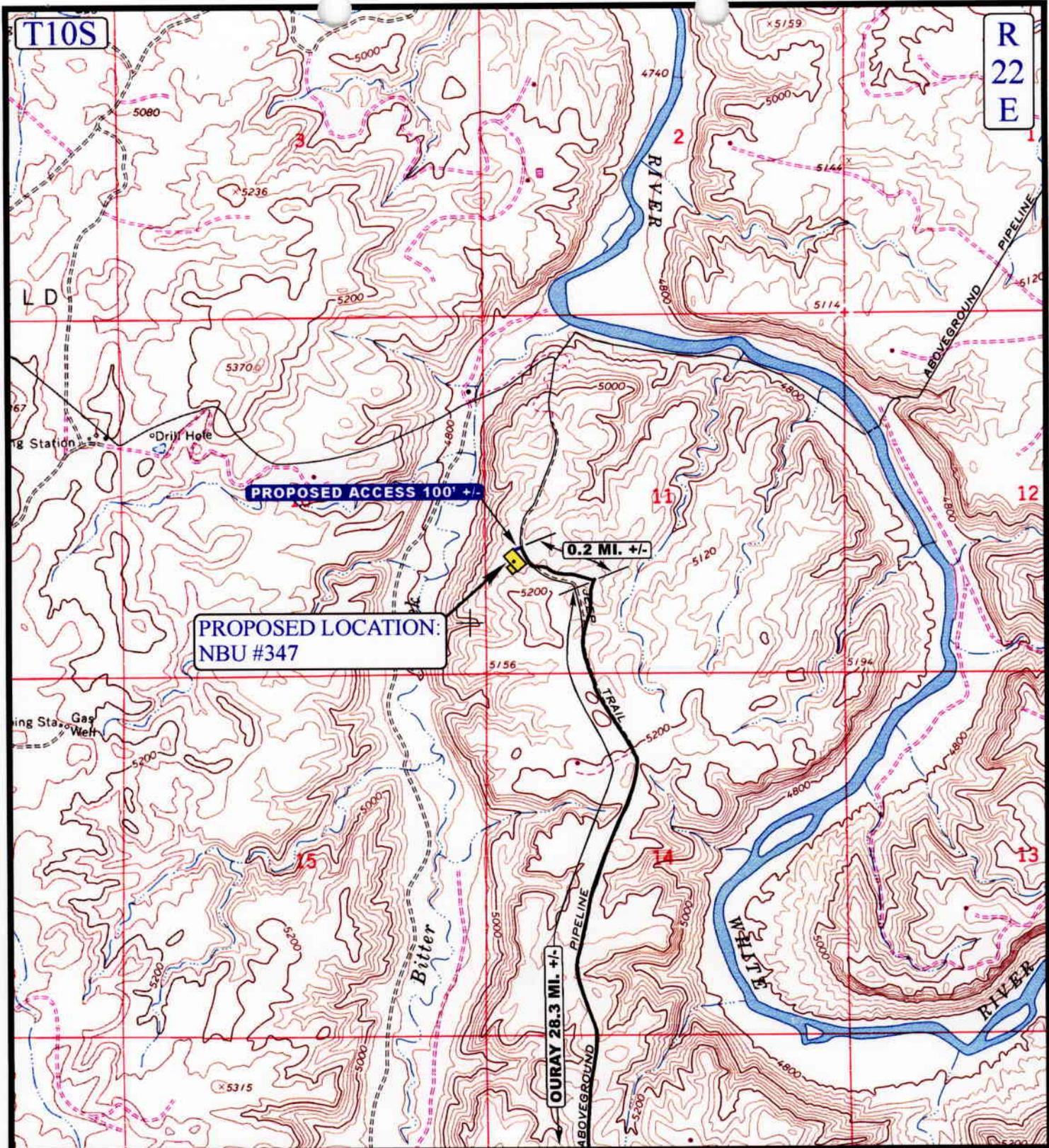
Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC**  
**MAP**

<b>10</b>	<b>19</b>	<b>98</b>
MONTH	DAY	YEAR

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





**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING ROAD

**COASTAL OIL & GAS CORP.**

NBU #347  
 SECTION 11, T10S, R22E, S.L.B.&M.  
 1697' FSL 411' FWL



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
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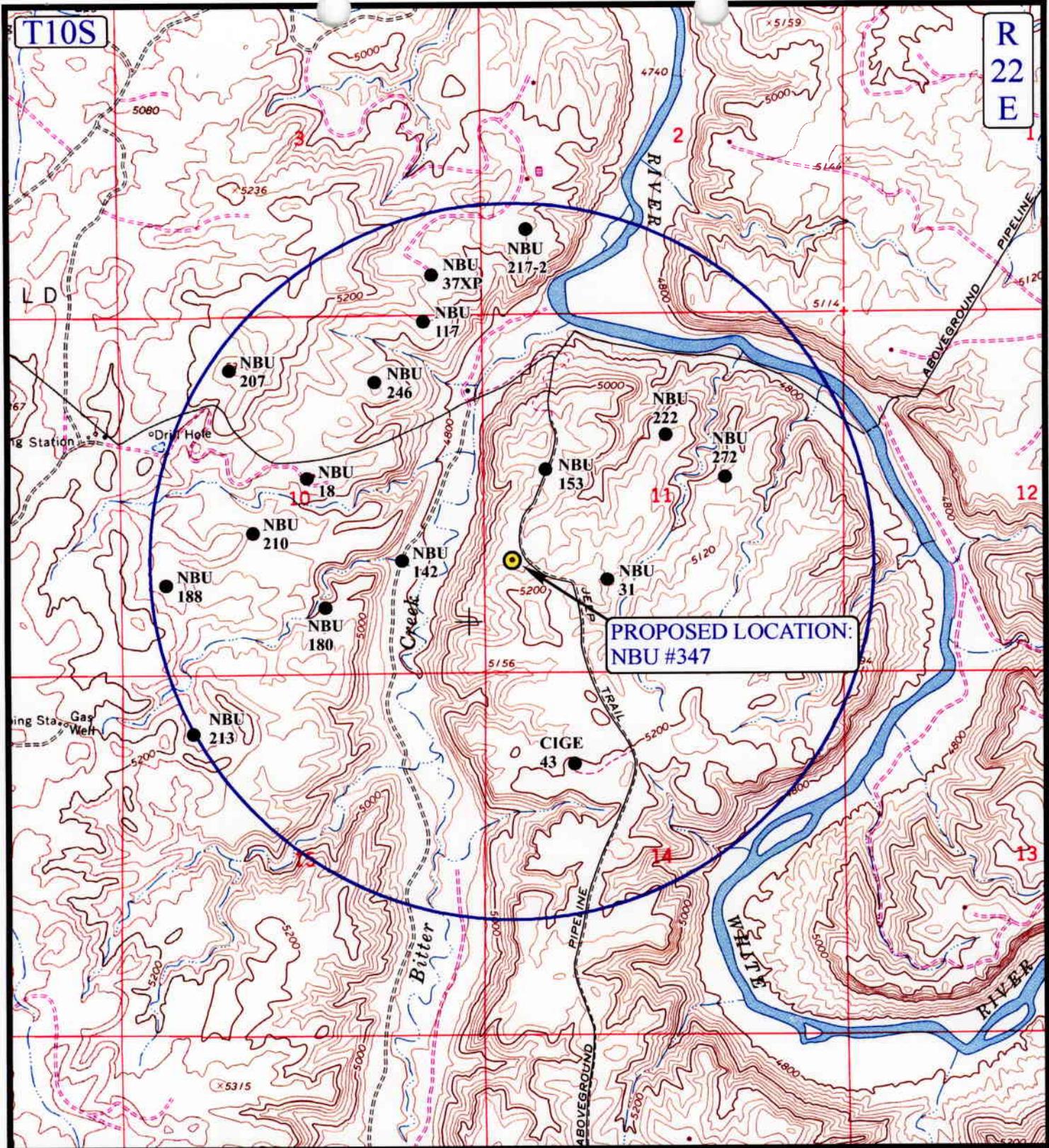


**TOPOGRAPHIC MAP**

**10 19 98**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00





**LEGEND:**

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



**COASTAL OIL & GAS CORP.**

**NBU #347**  
**SECTION 11, T10S, R22E, S.L.B.&M.**  
**1697' FSL 411' FWL**



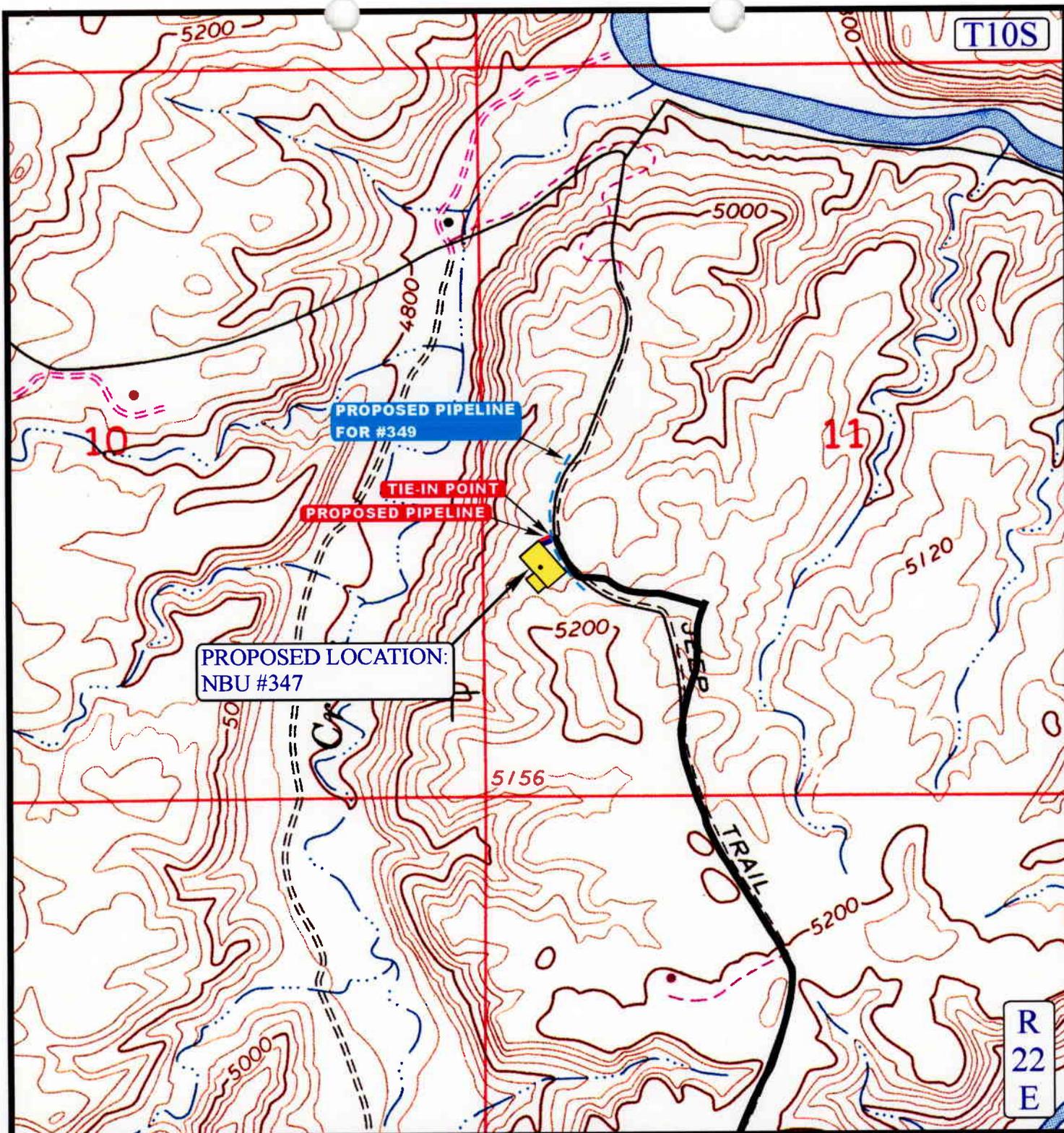
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 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC**  
**MAP**

**10 19 98**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00





**APPROXIMATE TOTAL PIPELINE DISTANCE = 75' +/-**

**LEGEND:**

- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED ACCESS



**COASTAL OIL & GAS CORP.**

**NBU #347**

**SECTION 11, T10S, R22E, S.L.B.&M.**

**1697' FSL 411' FWL**



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

**TOPOGRAPHIC  
 MAP**

**10 19 98**  
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: J.L.G. REVISED: 00-00-00





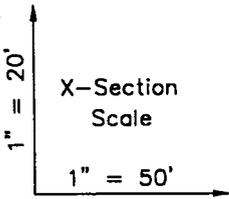
**COASTAL OIL & GAS CORP.**

**TYPICAL CROSS SECTIONS FOR**

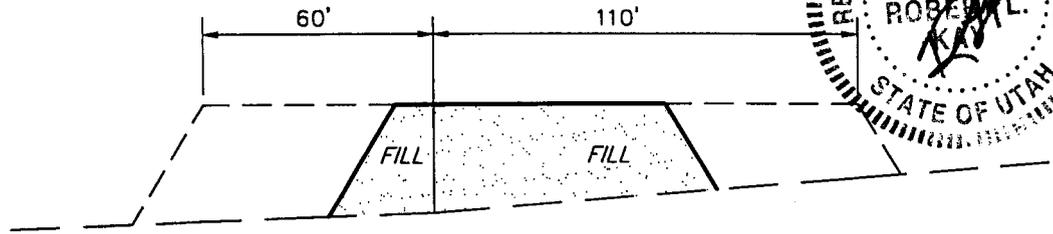
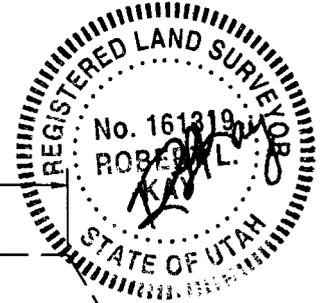
NBU #347

SECTION 11, T10S, R22E, S.L.B.&M.

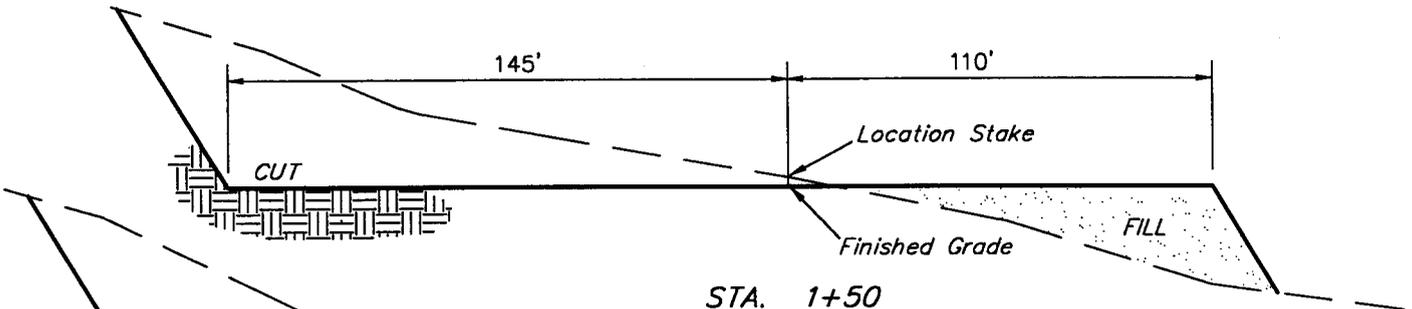
1697' FSL 411' FWL



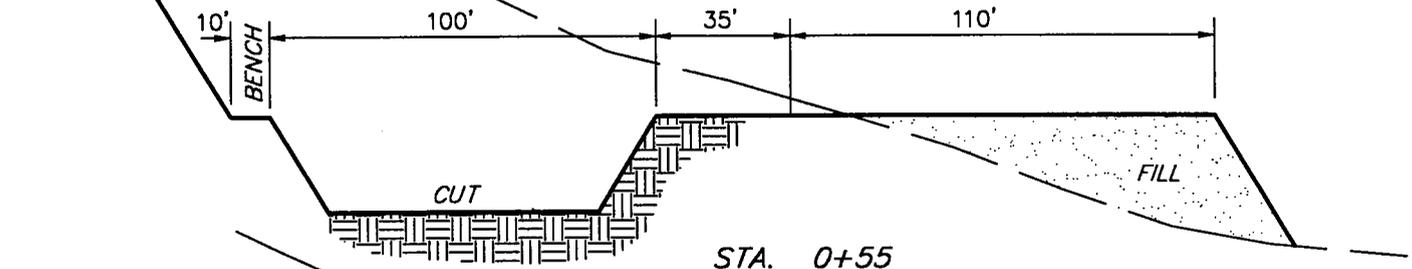
DATE: 10-15-98  
Drawn By: C.B.T.



STA. 3+25



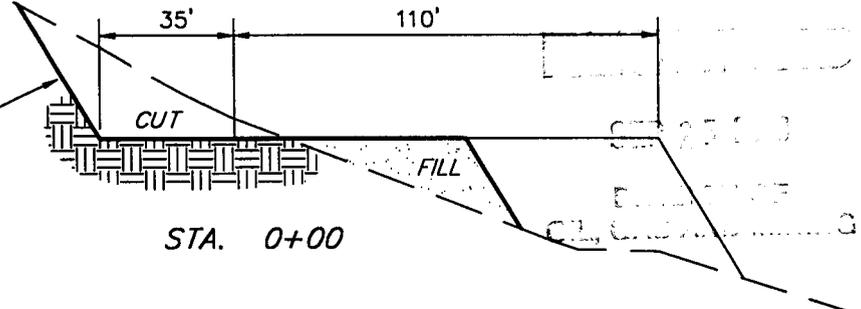
STA. 1+50



STA. 0+55

Preconstruction Grade

Slope = 1 1/2:1 (Typ.)



STA. 0+00

**FIGURE #2**

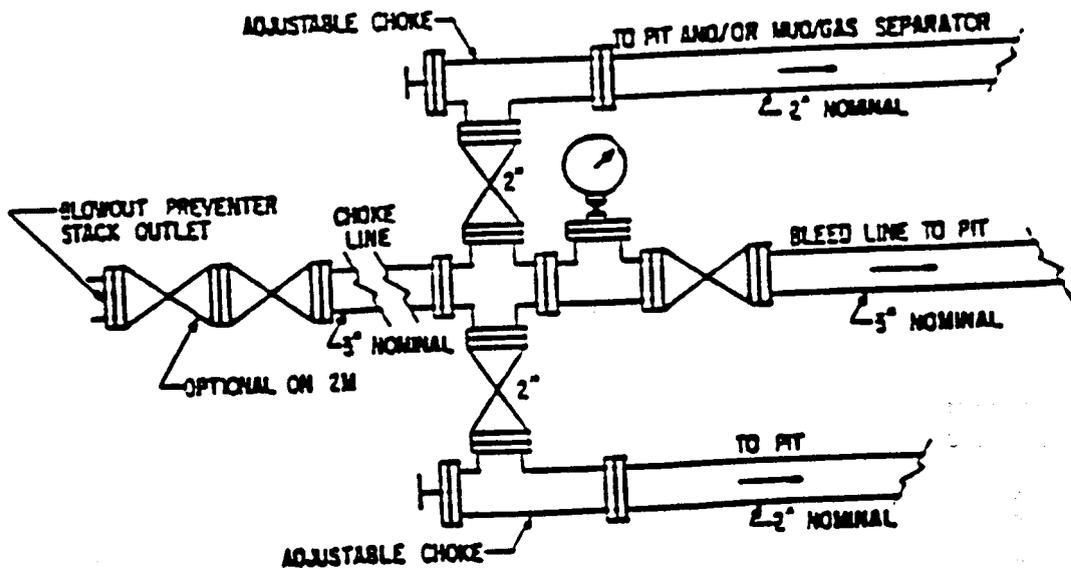
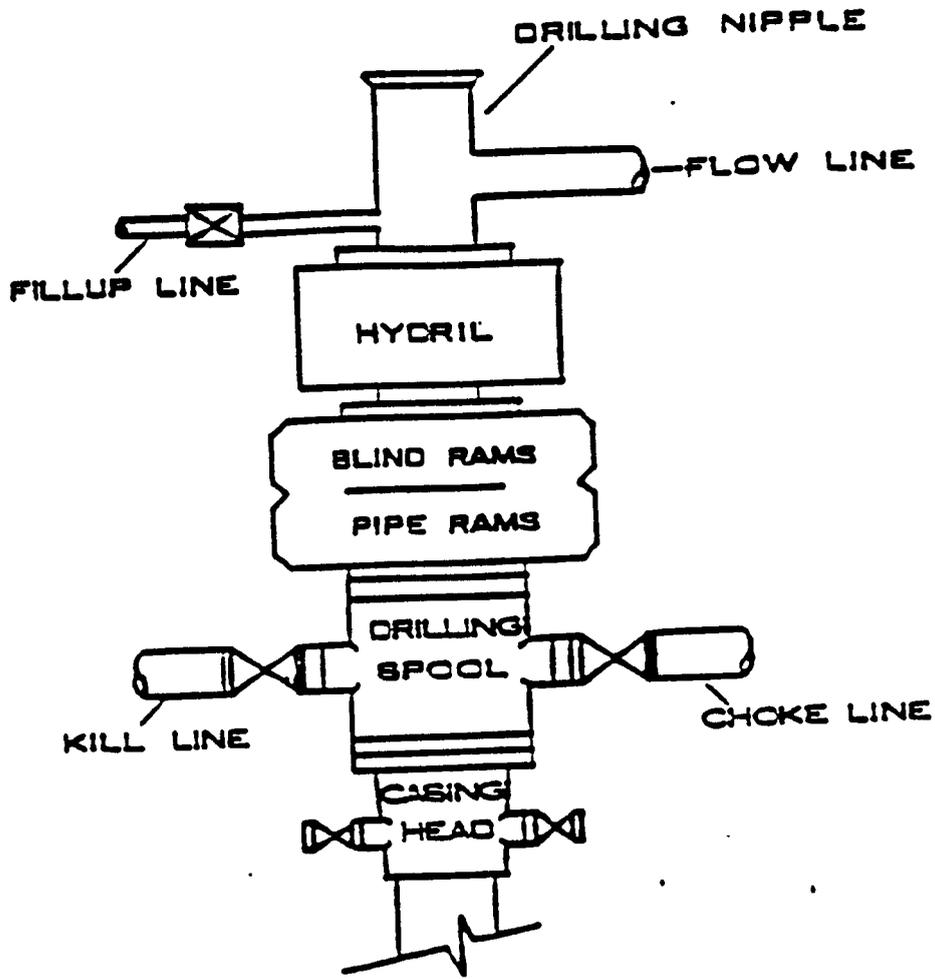
**APPROXIMATE YARDAGES**

CUT	
(6") Topsoil Stripping	= 1,140 Cu. Yds.
Remaining Location	= 11,430 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 12,570 CU.YDS.</b>
<b>FILL</b>	<b>= 9,590 CU.YDS.</b>

EXCESS MATERIAL AFTER 5% COMPACTION	= 2,480 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,480 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 0 Cu. Yds.

3,000 PSI

# BOP STACK





MONTGOMERY  
ARCHAEOLOGICAL  
CONSULTANTS

Box 147, 322 East 100 South, Moab, Utah 84532 (435) 259-5764 FAX (435) 259-5608 LPS \_\_\_\_\_

BLC \_\_\_\_\_ RAD \_\_\_\_\_ SCP \_\_\_\_\_ CEL \_\_\_\_\_

OCT 27 1998

XC: Drlg  
RNL

October 24, 1998

Ms. Bonnie Carson  
Coastal Oil & Gas Corporation  
Box 749  
Denver, CO 80201-0749

Dear Ms. Carson:

Enclosed please find the report entitled "Cultural Resource Inventory of Coastal Oil & Gas Corporation's CIGE 246, NBU 333, NBU 347, NBU 349 and NBU 350 Well Locations and Associated Pipelines, Uintah County, Utah." The inventory resulted in no cultural resources. Based on the findings, a determination of "no effect" is recommended pursuant to Section 106, CFR 800 for this undertaking.

Copies of the report has been sent to the appropriate state and federal agencies for review. If you have any questions or comments, please feel free to call me.

Sincerely,

Keith R. Montgomery  
Principal Investigator

cc: James Dykmann, Compliance Archaeologist, Utah SHPO  
Blaine Philips, BLM Archaeologist, Vernal District

CULTURAL RESOURCE INVENTORIES OF COASTAL OIL AND  
GAS CORPORATIONS CIGE 246, NBU 333, NBU 347, NBU 349  
AND NBU 350 WELL LOCATIONS, ACCESS ROADS,  
AND ACCESS ROADS IN UINTAH COUNTY, UTAH

by

Keith R. Montgomery

Prepared For:

State of Utah  
and  
Bureau of Land Management  
Vernal District

Prepared Under Contract With:

Coastal Oil & Gas Corporation  
P.O. Box 749  
Denver, Colorado 80201

Prepared By:

Montgomery Archaeological Consultants  
P.O. Box 147  
Moab, Utah 84532

October 23, 1998

United States Department of Interior (FLPMA)  
Permit No. 98-UT-60122

State of Utah Antiquities Project (Survey)  
Permit No. U-98-MQ-0631b,s

## INTRODUCTION

In October, 1998, cultural resource inventories were conducted by Montgomery Archaeological Consultants for Coastal Oil & Gas Corporation's proposed well locations CIGE 246, NBU 333, NBU 347, NBU 349 and NBU 350. The project area is located in the Sand Wash area about 11 miles southeast of Ouray, Uintah County, Utah. The survey was implemented at the request of Bonnie Carson, Coastal Oil & Gas Corporation, Denver, Colorado. The project area occurs on State of Utah land and Bureau of Land Management (BLM) administered lands, Book Cliffs Resource Area, Vernal District.

The objective of the inventories were to locate, document, and evaluate any cultural resources within the project area in order to comply with Section 106 of 36 CFR 800, the National Historic Preservation Act of 1966 (as amended). Also, the inventories were implemented to attain compliance with a number of federal and state mandates, including the National Environmental and Policy Act of 1969, the Archaeological and Historic Conservation Act of 1972, the Archaeological Resources Protection Act of 1979, the American Indian Religious Freedom Act of 1978, and Utah State Antiquities Act of 1973 (amended 1990).

The archaeological fieldwork was performed by Keith R. Montgomery, Principal Investigator for Montgomery Archaeological Consultants on October 17 and 21, 1998, under the auspices of U.S.D.I. (FLPMA) Permit No. 98-UT-60122 and State of Utah Antiquities Permit (Survey) No. U-98-MQ-0631b,s.

A file search for previous archaeological inventories and documented cultural resources was conducted on August 6, 1998, by the author at the Division of State History, State Historical Preservation Office, Salt Lake City. A second file search was completed by the author at the BLM Vernal District on September 10, 1998. These consultations indicated that numerous inventories have been completed in the area. In the vicinity of proposed Well Location No. NBU 347 an inventory was completed in 1991 by Metcalf Archaeological Consultants for Coastal Oil and Gas well locations (Lubinski and Scott 1991). At proposed Well Location No. NBU-349 two surveys have been conducted. In 1981, Brigham Young University surveyed the Sand Wash Shale Oil Plant (Nielson 1981). In 1986, Metcalf Archaeological Consultants inventoried Coastal Oil & Gas Corporations NBU-82 well location and access road (Metcalf 1986). No previously documented archaeological sites occur in the project areas.

In addition, a records search for paleontological localities was conducted by Martha Hayden, Utah Geological Survey (August 28, 1998). No previously recorded sites occur in the project areas, although vertebrates and plant fossils are known in the Uintah and Duchesne formations.

## DESCRIPTION OF PROJECT AREA

The project area is situated on the north end of East Bench and Archy Bench, along both sides of Sand Wash, Uintah County, Utah. It lies within the Uinta Basin physiographic unit, a distinctly bowl-shaped geologic structure (Stokes 1986:231). Specifically, the inventory area is situated in an area of broad erosional benches, buttes, and ridges dissected by drainages. The geology consists of the Early Tertiary age Uintah formation composed of thin-bedded flood plain deposits which overlays the Duchesne formations characterized by river-deposited conglomerate, sandstone, and fine-grained rocks. The nearest permanent water source is the White River located along the east side of the project area. Major intermittent drainages in the area include Sand Wash and Cottonwood Wash. The elevation of the project area ranges from 4880 to 5360 feet a.s.l. Vegetation cover is an Upper Sonoran desert shrub community which includes shadscale, sagebrush, greasewood, snakeweed, prickly pear cactus, Russian thistle, and blue gamma. Modern disturbances to the landscape includes roads, well locations, and pipelines mainly associated with oil/gas exploration.

The inventory area consists of five proposed well locations with access and/or pipeline corridors (Figures 1 and 2) The legal descriptions are T 10S, R 21E, S. 2 (State), 13 (State), and 14 (BLM); and T 10S, R 22E. S. 11 (State) and 14 (State).

Table 1. Coastal Oil & Gas Corporations Well Location Descriptions

Well Number	Legal Location	Location at Surface	Access Road	Cultural Resources
CIGE 246-2-10-21	T10S R21E S.2 NE/NW	474' FNL 2055' FWL	Access 500' Pipeline 500'	None
NBU 333	T10S R21E S.13 SW/SW	944' FSL 449' FWL	Access 1000' (BLM), 150' (State) Pipeline 1100' (BLM)	None
NBU 347	T10S R22E S.11 NW/SW	1697' FSL 411' FWL	Pipeline 4200'	None
NBU 349	T10S R22E S.11 SW/SE	1109' FSL 2405' FEL	Access 1200'	None
NBU 350	T10S R22E S.14 NW/NE	373' FNL 1845 FEL	Access 1800' Pipeline 3200'	None

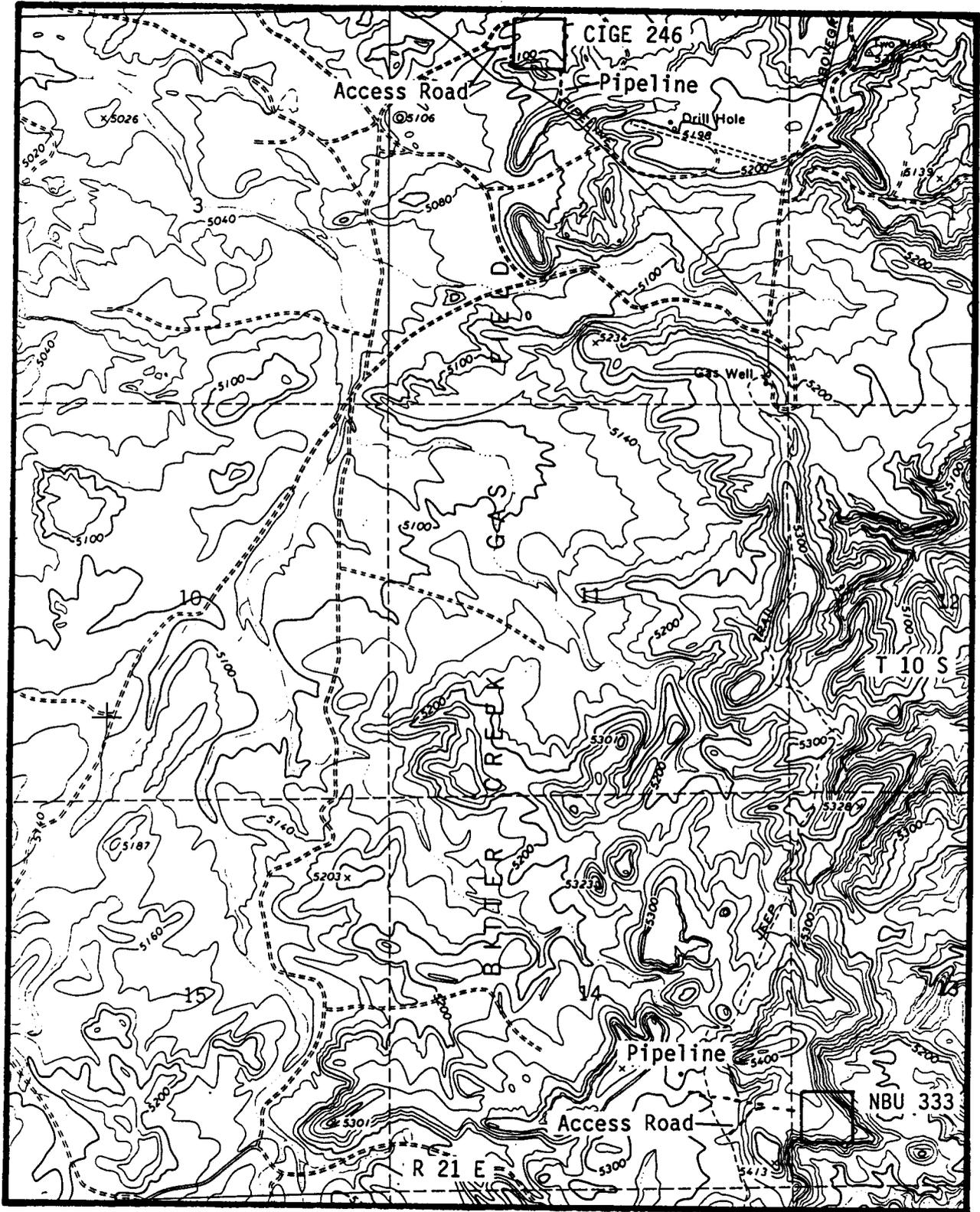


Figure 1. Inventory Area of Coastal Oil and Gas Corporation's Proposed Well Locations CIGE 246, and NBU 333 with Access Roads and Pipelines, Uintah County, UT USGS 7.5' Big Pack Mountain, NE , UT 1968. Scale 1:24000.

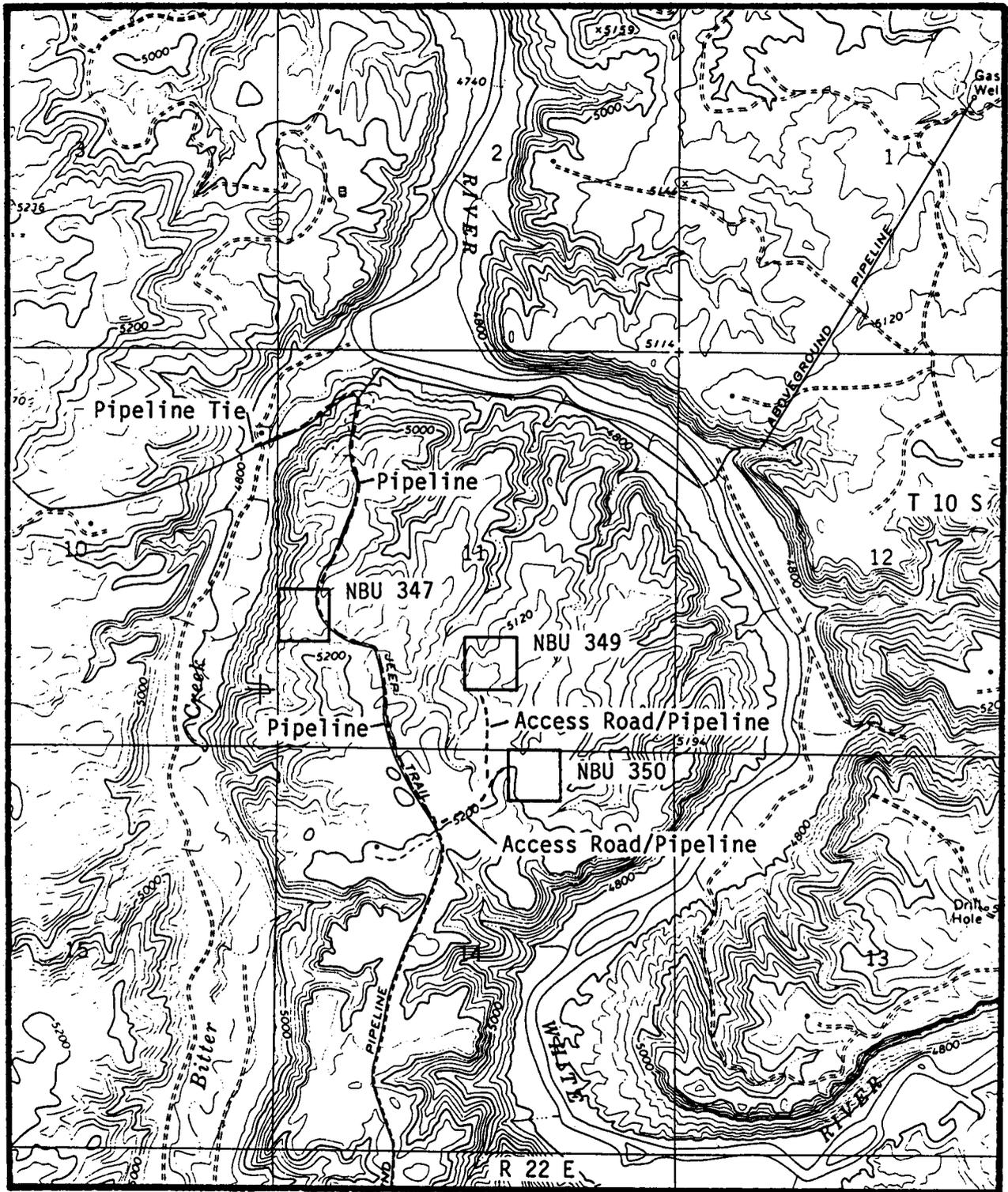


Figure 2. Inventory Area of Coastal Oil and Gas Corporation's Proposed Well Locations NBU 347, 349 and 350 with Access Roads and Pipelines, Uintah County, UT USGS 7.5' Archy Bench, UT 1968. Scale 1:24000.

## SURVEY METHODOLOGY

An intensive pedestrian survey was performed by the author for this project which is considered 100% coverage. At each of the five proposed well locations, a 10 acre square was defined, centered on the well pad center stake. The interiors of the well locations were examined for cultural resources by the archaeologist walking parallel transects spaced no more than 10 meters apart. The access roads and pipeline corridors were surveyed to a 150 foot width by the archaeologist walking parallel transects along the staked centerline, spaced no more than 10 meters apart. Ground visibility was considered good. A total of 96.9 acres was surveyed for this project consisting of 89.7 acres on State of Utah land and 7.2 acres on BLM administered land.

## RESULTS AND RECOMMENDATIONS

The inventory of Coastal Oil & Gas Corporation's proposed five well locations, access roads, and pipeline corridors resulted in no cultural resources.

Based on these findings, a determination of "no effect" is recommended for this project pursuant to Section 106, CFR 800.

## REFERENCES CITED

Lubinski, Patrick M. and John M. Scott

1991 Cultural Resource Inventory of 18 Proposed Coastal Oil and Gas Corporations Well Locations and Access Roads on State of Utah Lands, Uintah County, Utah. Metcalf Archaeological Consultants. Report No. 91-MM-44.

Metcalf, Michael

1986 Cultural Resource Inventory of the Coastal Oil and Gas Corporation NBU-82 Well Pad and Access Road, Uintah County, Utah. Metcalf Archaeological Consultants. Report No. 86-MM-704.

Nielson, Asa

1981 Cultural Resource Inventory of Tosco Corporation's Sand Wash Shale Oil Plant, Uintah County, Utah. Brigham Young University, Cultural Resource Management Service, Provo. Report No. 81-BC-721.

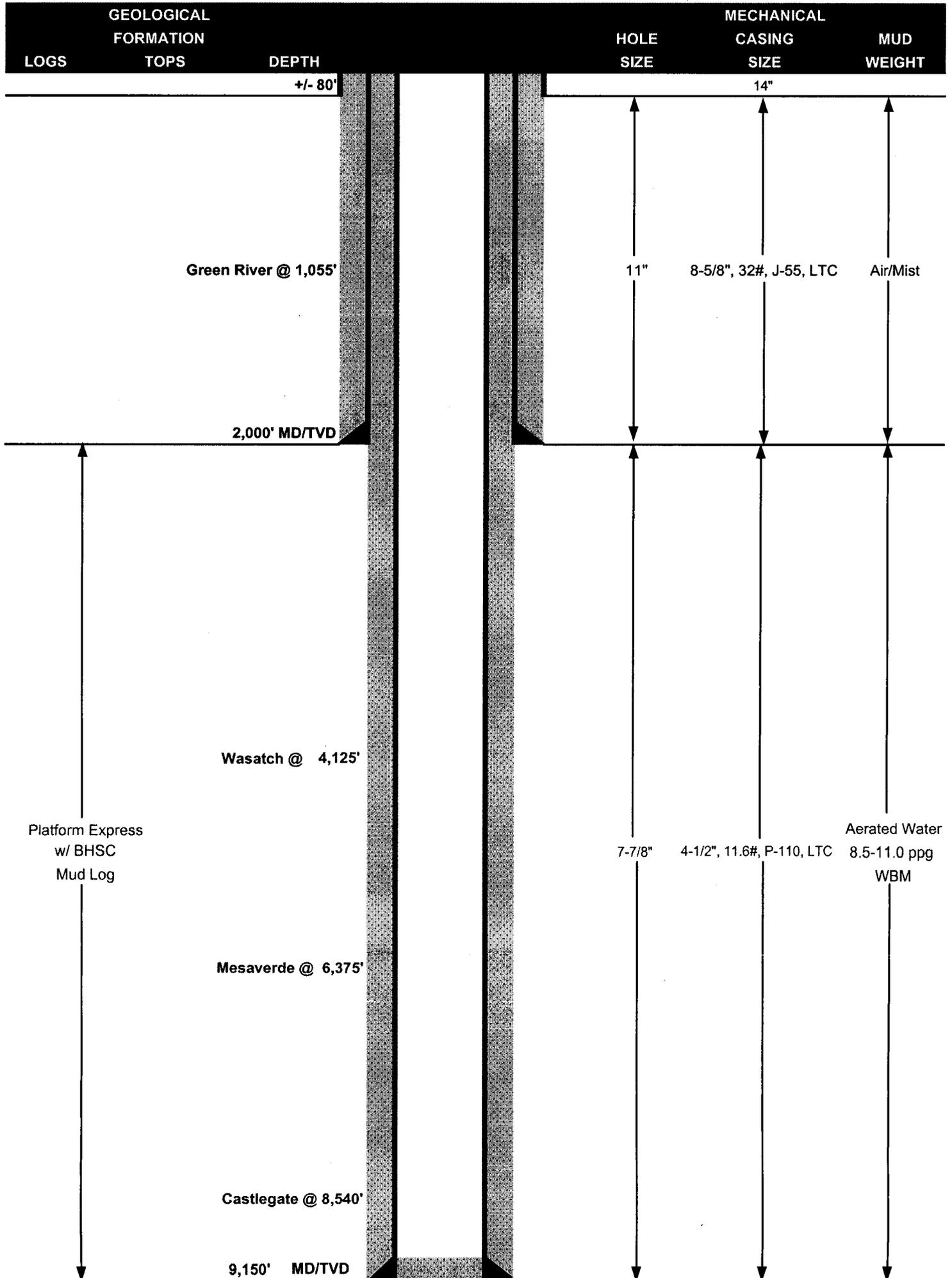
Stokes, William L.

1986 Geology of Utah. Utah Museum of Natural History and Utah Geological and Mineral Survey, Salt Lake City.

# COASTAL OIL & GAS CORPORATION

## DRILLING PROGRAM

COMPANY NAME Coastal Oil & Gas Corporation DATE 9/13/00  
 WELL NAME NBU #347 TD 9,150' MD/TVD  
 FIELD NBU COUNTY Uintah STATE Utah ELEVATION 5,140' KB  
 SURFACE LOCATION 1,697' FSL & 411' FWL Sec 11 T10S-R22E BHL Straight Hole  
 OBJECTIVE ZONE(S) Wasatch, Mesaverde  
 ADDITIONAL INFO \_\_\_\_\_



## COASTAL OIL & GAS CORPORATION DRILLING PROGRAM

### CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
SURFACE	8-5/8"	0-2,000'	32#	J-55	LTC	3,930 3.50	2,530 2.70	417,000 2.54
PRODUCTION	4-1/2"	0-TD	11.6#	P-110	LTC	10,690 2.56	7,560 1.44	279,000 1.35

- 1) Maximum Anticipated Surface Pressure (MASP) (Conductor and Surface Casings) = (Frac Gradient at Shoe - Gas Gradient (0.115 psi/ft))(TVD)
  - 2) MASP (Int Casing) = Pore Pressure at Next Casing Point - (Gas Gradient x TVD of Next Casing Point x 0.67) - (Mud Weight x TVD x 0.052 x 0.33)
  - 3) MASP (Prod Casing) = Pore Pressure - (Gas Gradient x TVD of Production Interval)
- (Burst Assumptions: FG @ 8-5/8" shoe = 13.0 ppg, Max Pore Pressure = 11 ppg Max MW)  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing, 100,000 lbs overpull)

### CEMENT PROGRAM

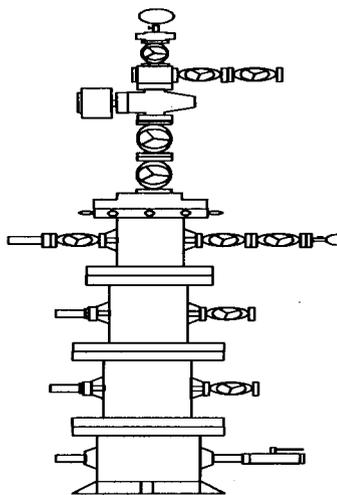
		FT. OF FILL	DESCRIPTION	SACKS	EXCESS*	WEIGHT	YIELD
SURFACE	LEAD	1,500'	Lite Class G + 2% CaCl <sub>2</sub> + 0.25 lb/sk Flocele	320	50%	12.70	1.82
	TAIL	500'	Lite Class G + 2% CaCl <sub>2</sub> + 0.25 lb/sk Flocele	200	75%	15.60	1.19
PRODUCTION	LEAD	3,825'	HiFill-Mod + 0.6% EX-1 + 0.25 lb/sk Flocele + 0.2% FWCA + 10 lb/sk Gilsonite + 16% Gel + 1% HR-7 + 3% Salt	460	100%	11.60	3.81
	TAIL	5,325'	50/50 Poz + 0.25 lb/sk Flocele + 0.4% HALAD-322 + 2% Gel + 2% Microbond HT + 0.1% HR-5 + 5% Salt	1670	75%	14.40	1.28

\* or 15% over caliper

### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 joint, float collar. Centralize first 3 joints & every other collar to surface. Thread lock FE up to and including pin end of float collar.
PRODUCTION	Guide shoe, 1 joint, float collar. Install 2 bow spring centralizers on the shoe joint and 1 on the next two joints. Then 1 centralizer every third joint to top of tail cement. Thread lock FE up to and including pin end of FC.

### WELLHEAD EQUIPMENT

	TREE	2-1/16" 5M
	TUBING HEAD	11" 5M X 7-1/16" 10M
	CASING SPOOL	
	CASING SPOOL	13-5/8" 3M X 11" 5M
	CASING HEAD	8-5/8" SOW X 11" 5M

# COASTAL OIL & GAS CORPORATION

## DRILLING PROGRAM

**BIT PROGRAM**

ROCK BIT & PDC BIT PROGRAM						
INTERVAL	HOLE	BIT MFG & MODEL	GPM	SERIAL	NZLS	COMMENTS
Surface Hole	11"	STC F27 or Equiv.	Air	NEW	3 - 18's	Air / Air Mist
Production Hole	7-7/8"	Various Inserts / PDC's	350-400	NEW	3 - 18's	Air / Air Mist / Water

**GEOLOGICAL DATA**

**LOGGING:**

Depth	Log Type
SC - TD	Platform Express with Sonic

**MUD LOGGER:**

2,000' - TD

**SAMPLES:**

As per Geology

**CORING:**

**DST:**

**MUD PROGRAM**

DEPTH	TYPE	WATER			TREATMENT
		MUD WT	LOSS	VISCOSITY	
0-2000	Air Mist	NA	NA		
SC-TD	Mist/Water/Mud	8.5-11.0	NC - <10 cc's	30-45	Champion Corrosion Chemicals Polymer, Lime, Brine, Barite

**ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,000 psi prior to drilling out. Test int. csg. to 1,500 psi prior to drilling out.

11" 5M with one 5M annular and 2 rams. Test to 5,000 psi (annular to 3,000 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves. Corrosion treatment while drilling with air - RU160 then pump O<sub>2</sub> scavenger and proceed with scale inhibitor only.

Run Totco survey every 1500' from surface casing shoe to TD. Maximum allowable hole angle is 5 degrees.

**PROJECT ENGINEER:**

Christa Yin

**DATE:**

**PROJECT MANAGER:**

Darrell Molnar

**DATE:**

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 09/25/2000

API NO. ASSIGNED: 43-047-33709

WELL NAME: NBU 347  
 OPERATOR: COASTAL OIL & GAS CORP ( N0230 )  
 CONTACT: CHERYL CAMERON

PHONE NUMBER: 435-781-7023

PROPOSED LOCATION:

NWSW 11 100S 220E  
 SURFACE: 1697 FSL 0411 FWL  
 BOTTOM: 1697 FSL 0411 FWL  
 UINTAH  
 NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	<i>RFK</i>	10-31-00
Geology		
Surface		

LEASE TYPE: 3- state  
 LEASE NUMBER: U-01197-A-ST  
 SURFACE OWNER: 3-state

PROPOSED FORMATION: MVRD

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[3] Fee[]  
(No. 10 21 03 )
- Potash (Y/N)
- Oil Shale (Y/N) \*190 - 5 (B)
- Water Permit  
(No. 43-8496 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)

LOCATION AND SITING:

- R649-2-3. Unit Natural Buttes
- R649-3-2. General  
Siting: \_\_\_\_\_
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: 173-14  
Eff Date: 12-2-99  
Siting: 460' to Unit Boundary E. Uncomm. Tract.
- R649-3-11. Directional Drill

COMMENTS: Need Presite. (10-12-00)  
NEED H<sub>2</sub>S CONTINGENCY PLAN (rec'd 11-7-2000)

STIPULATIONS: ① STATEMENT OF BASIS  
② OIL SHALE



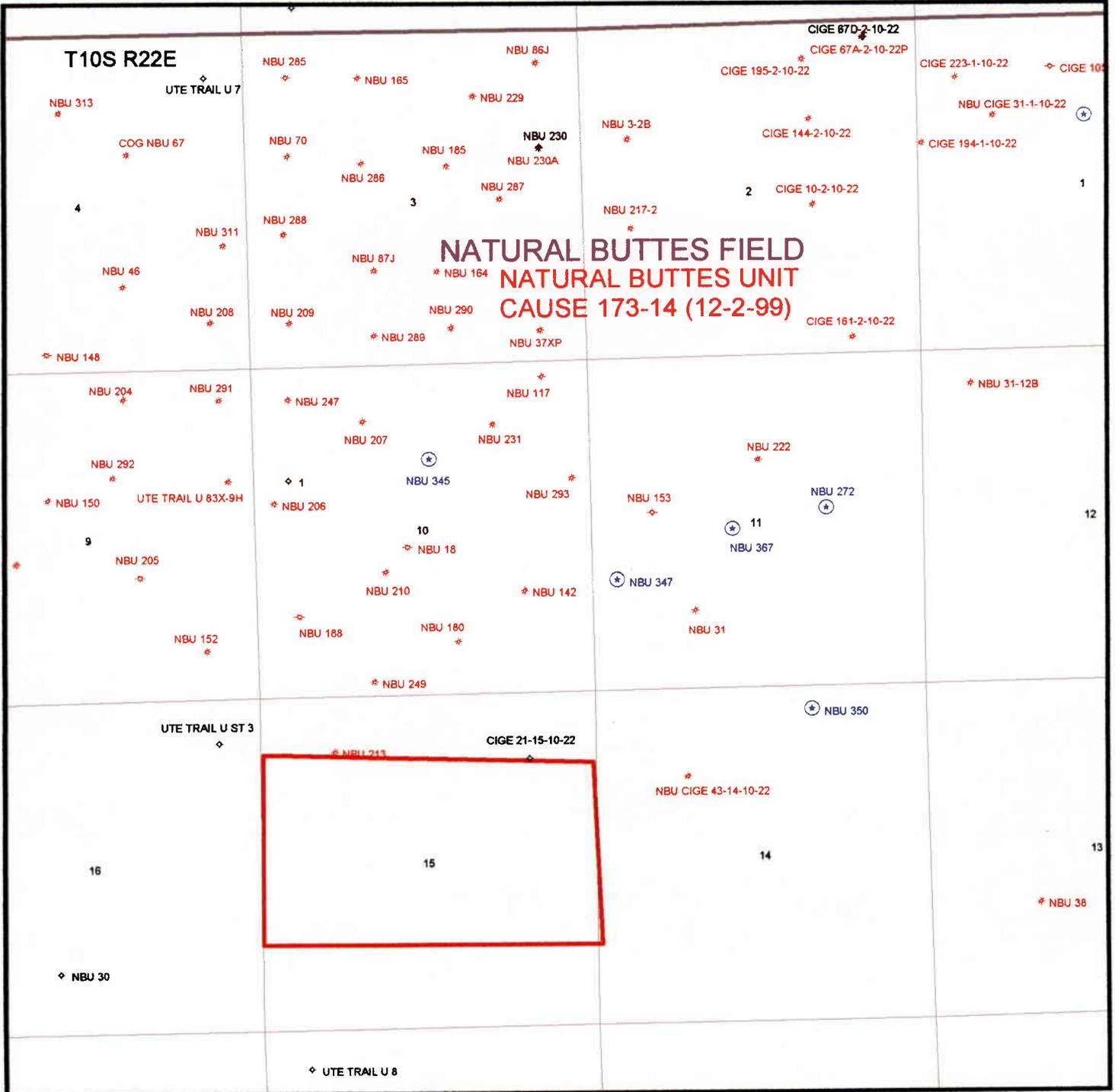
Utah Oil Gas and Mining

OPERATOR: COASTAL O&G CORP (N0230)

FIELD: NATURAL BUTTES (630)

SEC. 10 & 11, T10S, R22E,

COUNTY: UINTAH UNIT: NATURAL BUTTES  
CAUSE: 173-14



PREPARED BY: LCORDOVA  
DATE: 25-SEPTEMBER-2000

~~ON-SITE~~ **ON-SITE PREDRILL EVALUATION**

**Division of Oil, Gas and Mining**

OPERATOR: Coastal Oil & Gas Corporation  
WELL NAME & NUMBER: NBU #347  
API NUMBER: 43-047-33709  
LEASE: U-01197-A-ST FIELD/UNIT: Natural Buttes  
LOCATION: 1/4, 1/4 NW/SW Sec:11 TWP:10S RNG:22E 1697' FSL 411' FWL  
LEGAL WELL SITING: 460 feet from unit boundary.  
GPS COORD (UTM): 12 635361E; 4424620N  
SURFACE OWNER: SITLA

PARTICIPANTS

Dennis L. Ingram (DOGM); Carroll Estes; Carroll Williams; Debbie Harris; Don Deterrera; and Clay Enerson (Coastal Oil & Gas); Gary Scott (Jackson Construction); Robert Kay (Uinta Engineering); John Fausett (Fausett Inc); Tim Justice (L&L Oilwell services).

REGIONAL/LOCAL SETTING & TOPOGRAPHY

Proposed site is set approximately 23.5 miles south and east of Ouray 1400' east of Bitter Creek and 3600' south of the White River on narrow northeast/southwest ridge. Ridge line dips toward northeast.

SURFACE USE PLAN

CURRENT SURFACE USE: Wildlife use and domestic grazing

PROPOSED SURFACE DISTURBANCE: Access road and 12" gas gathering line in place just east of location. A short access road will come off Same just north of location. Location is proposed as 170'x 325' plus Reserve pit disturbance.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: NBU #207; NBU #188; NBU #213; NBU #180; NBU #210; NBU #18; NBU #142; NBU #246; NBU #117; NBU #37XP; NBU #217-2; NBU #153; NBU 222; NBU 272; CIGE #43.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production equipment shall be remain on location. Short gas line is proposed to tie Into existing 12" gathering line that runs along western border of roadway.

SOURCE OF CONSTRUCTION MATERIAL: Native cut and fill or borrowed material

ANCILLARY FACILITIES: None requested.

WASTE MANAGEMENT PLAN:

Submitted to DOGM with application to Drill

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: Over looking Bitter Creek and the White River drainage systems.

FLORA/FAUNA: Shadscale, prickly-pear cactus, sagebrush habitat typical of region. Mule deer, antelope, mountain lion, black bear potential, coyotes, rabbits, and other small birds and mammals typical of region.

SOIL TYPE AND CHARACTERISTICS: Light brown to tn sandy loam with some clay.

SURFACE FORMATION & CHARACTERISTICS: Uinta Formation.

EROSION/SEDIMENTATION/STABILITY: Active erosion, some sedimentation present, no stability problems anticipated with construction of location but underlying sandstone rock could provide fracture rocks and migration channels from reserve pit or wellbore if preventative action is not taken.

PALEONTOLOGICAL POTENTIAL: None observed during onsite visit.

#### RESERVE PIT

CHARACTERISTICS: Located uphill in cut on south side of location in cut and parallel or adjacent to prevailing winds (south of wellbore), measuring 100'x 100'x 10' deep with 9650 bbl capacity.

LINER REQUIREMENTS (Site Ranking Form attached): Yes, 20 points

#### SURFACE RESTORATION/RECLAMATION PLAN

Shall be restored according to SITLA requirements at time of reclamation.

SURFACE AGREEMENT: Yes

CULTURAL RESOURCES/ARCHAEOLOGY: AERC

#### OTHER OBSERVATIONS/COMMENTS

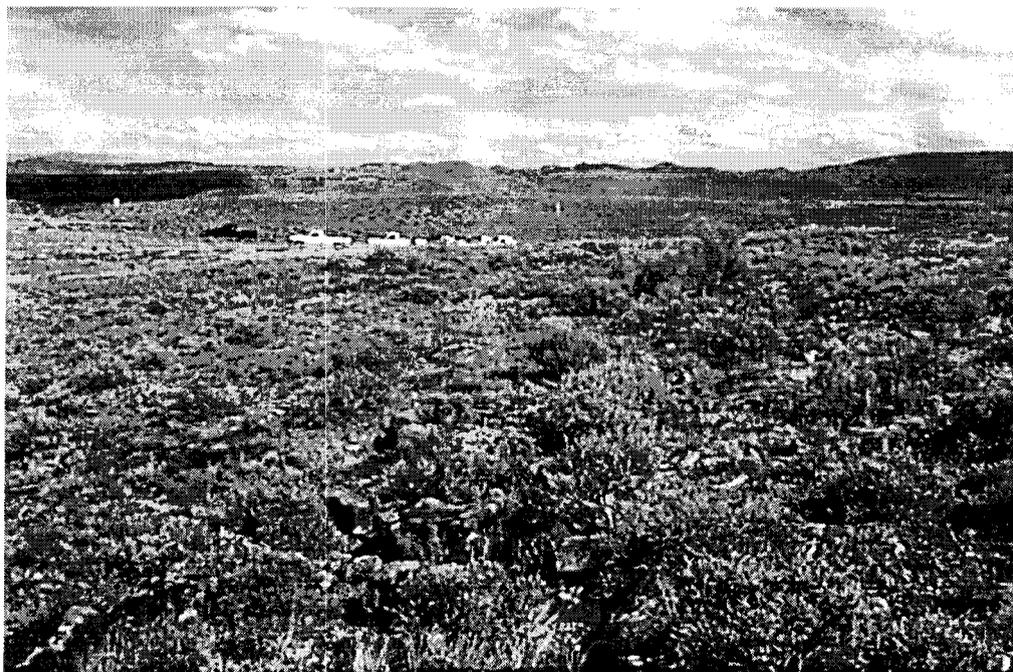
Previous well drilled two windows east along same topography had high concentrations of H<sub>2</sub>S.

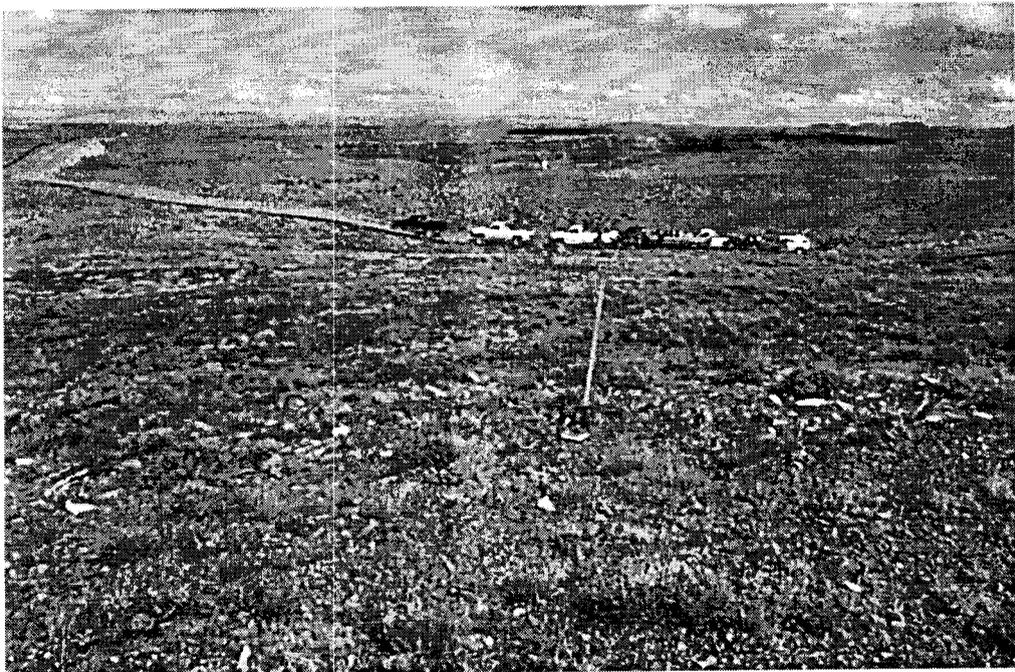
#### ATTACHMENTS:

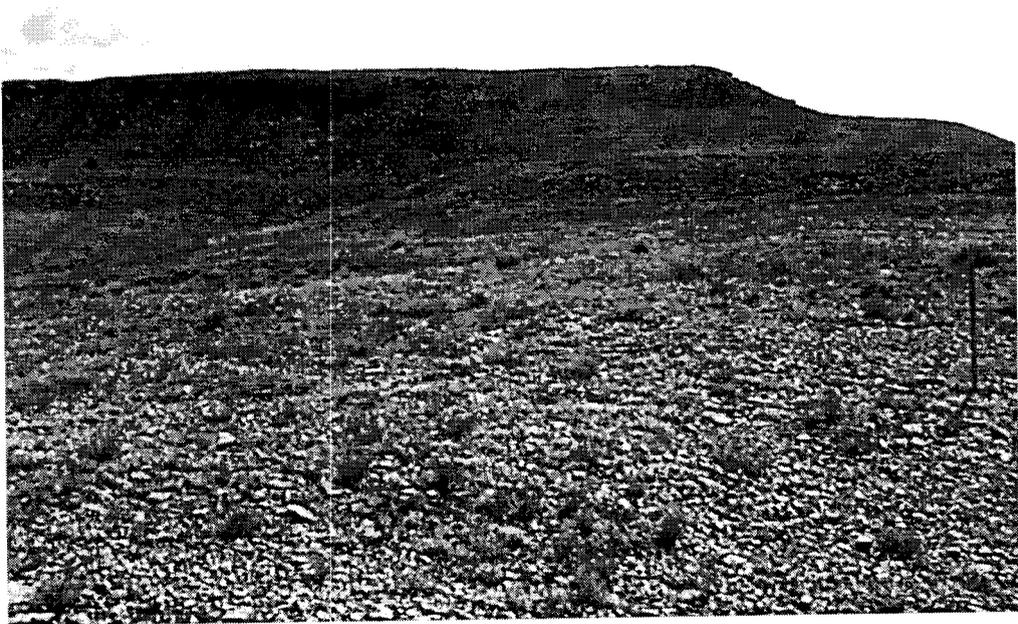
Photos attached of surface. Image #16 staking; #17 north look south across same; #18 look from west side location toward Bitter Creek; #19 west look east across same; #20 south look north; #21 looking north at corners #6 and 7 with Bitter Creek on left; #22 Photo shows narrow ridge looking north across location with pipeline on right and Bitter Creek on left .

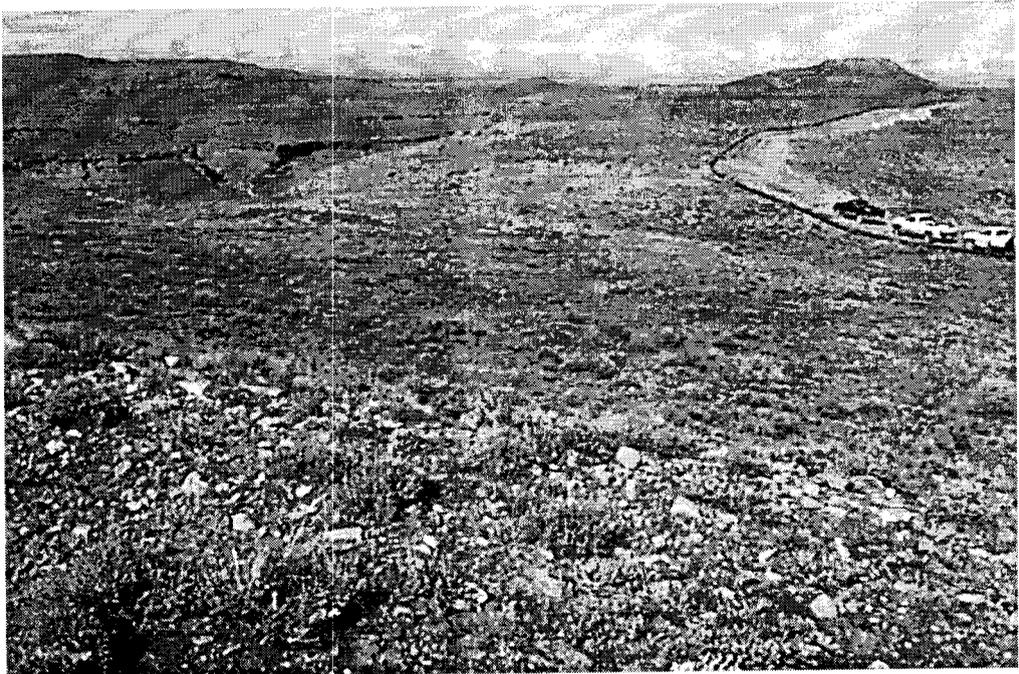
Dennis L. Ingram  
DOGM REPRESENTATIVE

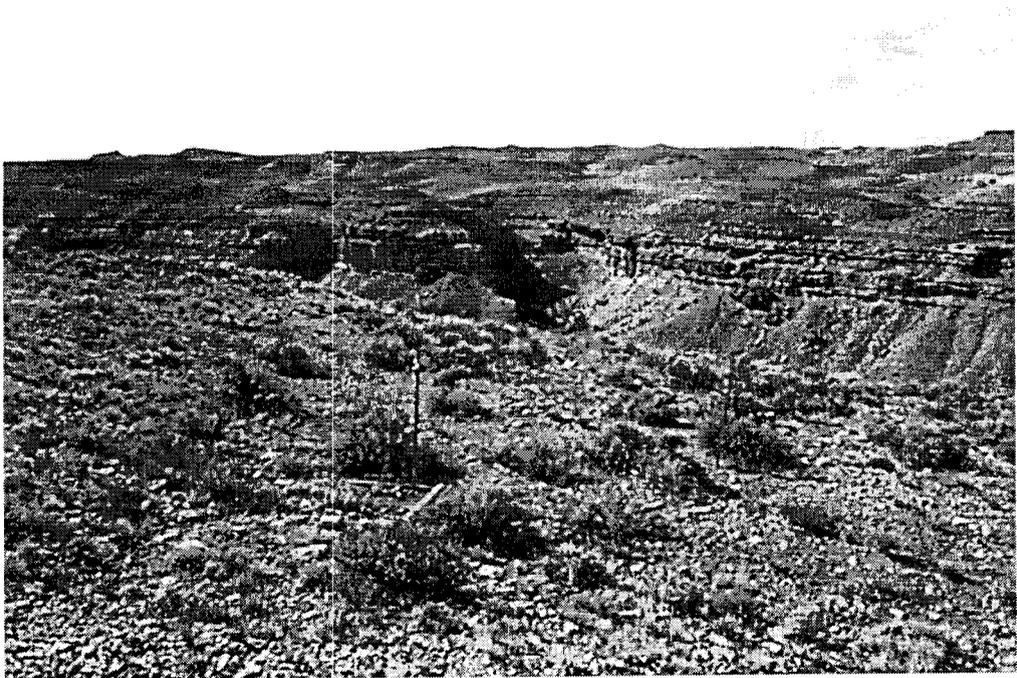
10/12/00 1:49 PM  
DATE/TIME

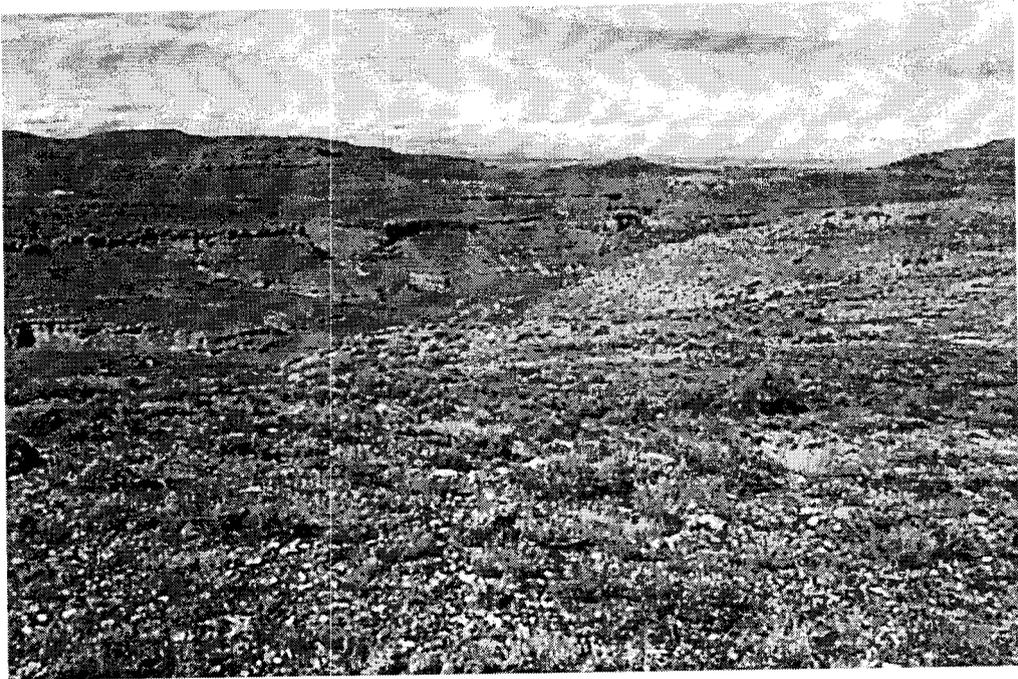












**DIVISION OF OIL, GAS AND MINING  
APPLICATION FOR PERMIT TO DRILL  
STATEMENT OF BASIS**

**Operator Name:** Coastal Oil & Gas Corporation  
**Name & Number:** NBU #347  
**API Number:** 43-047-33709  
**Location:** 1/4,1/4 NW/SW Sec. 11 T. 10S R. 22E

**Geology/Ground Water:**

Coastal proposes to set 2000' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,500'. A search of Division of Water Rights records shows 1 water well within a 10,000 foot radius of the center of section 11. This is listed as being used for mining. No culinary use is indicated. The well is approximately a mile in distance from the proposed well. Depth of this well is 1390'. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought to above the base of the moderately saline groundwater in order to isolate it from fresher waters uphole.

**Reviewer:** Brad Hill  
**Date:** 10/31/2000

**Surface:**

A presite investigation was done on 10/12/00 after being rained out the previous day. The surface and minerals belong to SITLA. Ed Bonner with SITLA was notified by DOGM of the onsite schedule but was unable to attend. This well site is outside of the window of tolerance but is in a federal drilling unit, according to Coastal, and is probably the best siting for the well because of topography. Underlying sandstone outcropping in both adjacent canyons indicate potential for seepage from reserve pit or wellbore and appropriate action should be taken on both to prevent same. Said operator has proposed 80' of conductor and 2000' of surface pipe. The 80' of conductor pipe may or may not be adequate to prevent seepage. Said operator should also take appropriate caution to have on hand H2S equipment to assure crew safety during drilling program (or at minimum, monitor activity for H2S to maintain crew safety concerns). Comments were address at meeting of H2S presence on previous drilled well two drilling windows east and north along same topography. (Reference well was NBU #272)

**Reviewer:** Dennis L. Ingram  
**Date:** October 20, 2000

**Conditions of Approval/Application for Permit to Drill:**

1. A 20 mil liner shall be properly installed in the reserve pit.
2. An H<sub>2</sub>S contingency plan shall be in place prior to spudding the well.

**Evaluation Ranking Criteria and Ranking Score  
For Reserve and Onsite Pit Liner Requirements**

<u>Site-Specific Factors</u>	<u>Ranking</u>	<u>Site Ranking</u>
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	<u>0</u>
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	<u>0</u>
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	15	<u>0</u>
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	<u>0</u>
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	<u>20</u>
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	15	
TDS >10000 or Oil Base	20	
Mud Fluid containing high levels of hazardous constituents		<u>0</u>
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	<u>0</u>
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	<u>0</u>
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	<u>0</u>
Presence of Nearby Utility		
Conduits		
Not Present	0	
Unknown	10	
Present	15	<u>0</u>
<b>Final Score (Level II Sensitivity)</b>		<u>20 points</u>

UTAH DIVISION OF WATER RIGHTS  
WATER RIGHT POINT OF DIVERSION PLOT CREATED TUE, OCT 31, 2000, 10:56 AM  
PLOT SHOWS LOCATION OF 16 POINTS OF DIVERSION

PLOT OF AN AREA WITH A RADIUS OF 10000 FEET FROM A POINT  
FEET, FEET OF THE CT CORNER,  
SECTION 11 TOWNSHIP 10S RANGE 22E SL BASE AND MERIDIAN

PLOT SCALE IS APPROXIMATELY 1 INCH = 4000 FEET

N O R T H

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UTAH DIVISION OF WATER RIGHTS  
 NWPLAT POINT OF DIVERSION LOCATION PROGRAM

MAP CHAR	WATER RIGHT	QUANTITY CFS	AND/OR AC-FT	SOURCE DESCRIPTION or WELL INFO DIAMETER	DEPTH	YEAR LOG	NORTH	EAST	CNR	SEC	TWN	RNG	B&M
0	49 862	.0000	.00	White River									
		WATER USE(S): STOCKWATERING OTHER										PRIORITY DATE: 00/00/190	
		USA Bureau of Land Management										Salt Lake City	
0	49 863	.0000	.00	White River									
		WATER USE(S): STOCKWATERING OTHER										PRIORITY DATE: 00/00/190	
		USA Bureau of Land Management										Salt Lake City	
1	49 611	.0000	.30	Chapita Wells Reservoir #1			S 1650	E 1100	N4	1	10S	22E	SL
		WATER USE(S): STOCKWATERING OTHER										PRIORITY DATE: 00/00/186	
		USA Bureau of Land Management										Salt Lake City	
2	49 612	.0000	1.00	Chapita Wells Reservoir #2			S 2300	E 1200	N4	1	10S	22E	SL
		WATER USE(S): STOCKWATERING OTHER										PRIORITY DATE: 00/00/186	
		USA Bureau of Land Management										Salt Lake City	
3	49 304	.0000	105000.00	White River & tributaries			S 555	E 1290	NW	11	10S	22E	SL

		WATER USE(S): DOMESTIC POWER OTHER							PRIORITY DATE: 05/19/196
		State of Utah Board of Water Resources	1594 West North Temple, Ste 310						Salt Lake City
3	49 113	.0000	250000.00 White River & Tributaries	S	555 E	1290	NW 11 10S 22E SL		PRIORITY DATE: 05/19/196
		WATER USE(S): DOMESTIC MINING POWER							Salt Lake City
		State of Utah Board of Water Resources	1594 West North Temple, Ste 310						
3	49 1272	.0000	1500.00 White River & Tribs. & Undergr	S	555 E	1290	NW 11 10S 22E SL		PRIORITY DATE: 05/19/196
		WATER USE(S): DOMESTIC OTHER							Salt Lake City
		State of Utah Board of Water Resources	1594 West North Temple, Ste 310						
4	49 903	.0000	.00 Bitter Creek						PRIORITY DATE: 00/00/190
		WATER USE(S): STOCKWATERING OTHER							Salt Lake City
		USA Bureau of Land Management	2370 South 2300 West						
5	49 353	.4000	.00 7 1390	S	2128 E	2313	NW 12 10S 22E SL		PRIORITY DATE: 07/10/197
		WATER USE(S): MINING OTHER							Los Angeles
		Tosco Corporation	10100 Santa Monica Blvd						
6	49 859	.0000	.00 White River						PRIORITY DATE: 00/00/190
		WATER USE(S): STOCKWATERING OTHER							Salt Lake City
		USA Bureau of Land Management	2370 South 2300 West						
7	49 861	.0000	.00 White River						PRIORITY DATE: 00/00/190
		WATER USE(S): STOCKWATERING OTHER							Salt Lake City
		USA Bureau of Land Management	2370 South 2300 West						
8	49 861	.0000	.00 White River						PRIORITY DATE: 00/00/190
		WATER USE(S): STOCKWATERING OTHER							Salt Lake City
		USA Bureau of Land Management	2370 South 2300 West						
9	49 113	.0000	250000.00 White River & Tributaries	S	65 W	327	N4 24 10S 22E SL		PRIORITY DATE: 05/19/196
		WATER USE(S): DOMESTIC MINING POWER							Salt Lake City
		State of Utah Board of Water Resources	1594 West North Temple, Ste 310						
9	49 304	.0000	105000.00 White River & tributaries	S	65 W	327	N4 24 10S 22E SL		PRIORITY DATE: 05/19/196
		WATER USE(S): DOMESTIC POWER OTHER							Salt Lake City
		State of Utah Board of Water Resources	1594 West North Temple, Ste 310						
9	49 1272	.0000	1500.00 White River & Tribs. & Undergr	S	65 W	327	N4 24 10S 22E SL		PRIORITY DATE: 05/19/196
		WATER USE(S): DOMESTIC OTHER							Salt Lake City
		State of Utah Board of Water Resources	1594 West North Temple, Ste 310						
A	49 859	.0000	.00 White River						PRIORITY DATE: 00/00/190
		WATER USE(S): STOCKWATERING OTHER							Salt Lake City
		USA Bureau of Land Management	2370 South 2300 West						

Well name:	<b>11-00 Coastal NBU #347</b>	
Operator:	<b>Coastal</b>	Project ID:
String type:	<b>Surface</b>	43-047-33709
Location:	<b>Uintah County</b>	

**Design parameters:**

**Collapse**

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

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 103 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 250 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 0 psi  
 Internal gradient: 0.468 psi/ft  
 Calculated BHP 935 psi

No backup mud specified.

**Tension:**

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

Tension is based on buoyed weight.  
 Neutral point: 1,732 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 7,500 ft  
 Next mud weight: 9.000 ppg  
 Next setting BHP: 3,506 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 7,500 ft  
 Injection pressure 7,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ( )
1	2000	8.625	36.00	J-55	LT&C	2000	2000	7.7	20782
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	935	3450	3.69	935	4464	4.77	62	486	7.80 J

Prepared RJK  
 by: Utah Dept. of Natural Resources

Date: October 31,2000  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 2000 ft, a mud weight of 9 ppg The casing is considered to be evacuated for collapse purposes.  
 In addition, burst strength is biaxially adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>11-00 Coastal NBU #347</b>	
Operator:	<b>Coastal</b>	Project ID:
String type:	<b>Production</b>	<b>43-047-33709</b>
Location:	<b>Uintah County</b>	

**Design parameters:**

**Collapse**

Mud weight: 11.000 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 203 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 250 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 0 psi  
 Internal gradient: 0.571 psi/ft  
 Calculated BHP 5,229 psi

No backup mud specified.

**Tension:**

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

Non-directional string.

Tension is based on buoyed weight.

Neutral point: 7,645 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ( )
1	9150	4.5	11.60	P-110	LT&C	9150	9150	3.875	56108
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	5229	7580	1.45	5229	10694	2.05	89	279	3.15 J

Prepared RJK  
 by: Utah Dept. of Natural Resources

Date: October 31,2000  
 Salt Lake City, Utah

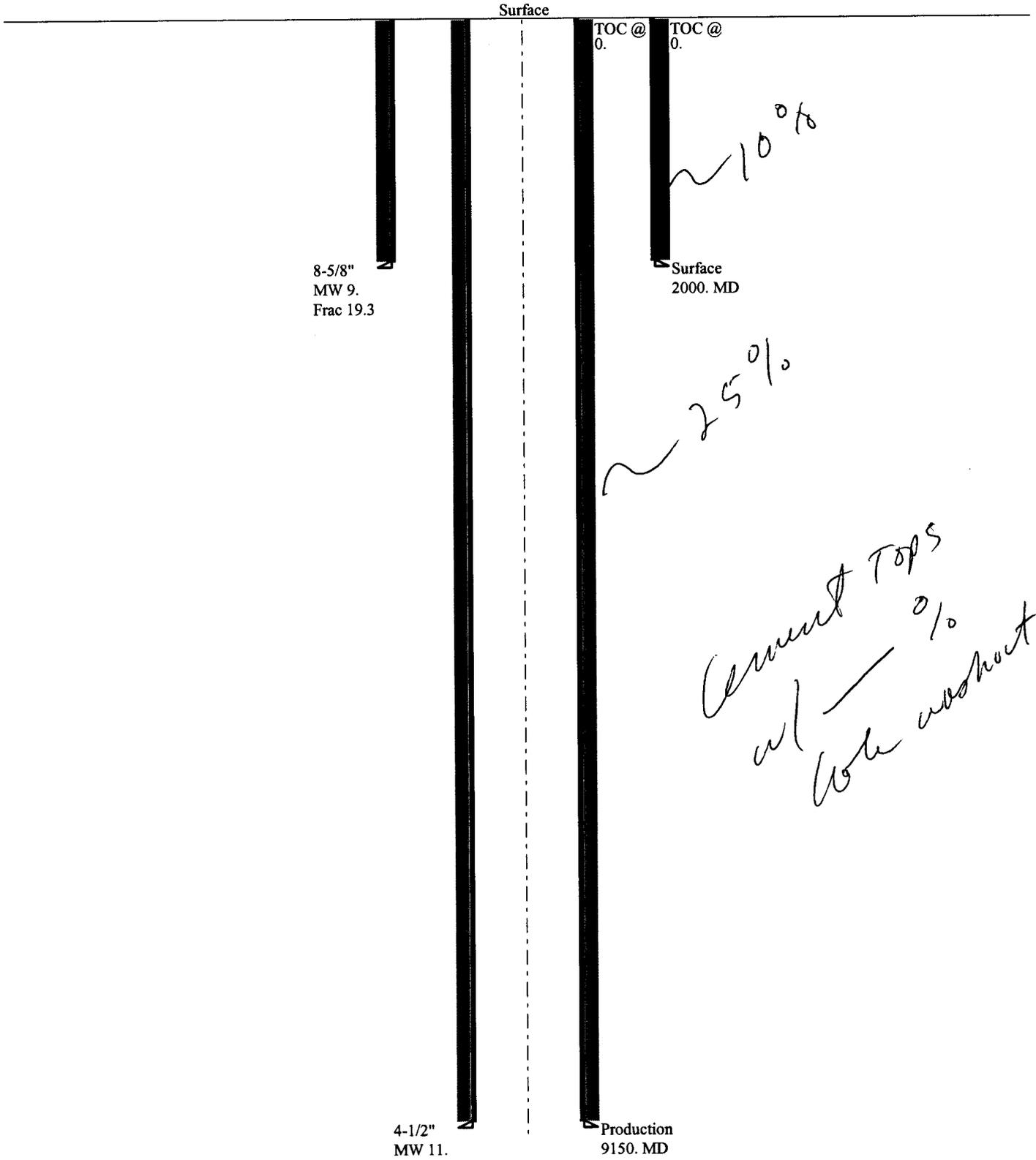
**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 9150 ft, a mud weight of 11 ppg. The casing is considered to be evacuated for collapse purposes.  
 In addition, burst strength is biaxially adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

# 11-00 Coastal NBU #347

## Casing Schematic



# **H<sub>2</sub>S Contingency Plan**

for

**NBU #347**

Section 11, Township 10S, Range 22E

Uintah County, Utah

Prepared for:  
**Coastal Oil & Gas Corporation**  
1368 South 1200 East  
P.O. Box 1148  
Vernal, UT 84078

**RECEIVED**

NOV 07 2000

DIVISION OF  
OIL, GAS AND MINING

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## **Introduction**

It is the policy of Coastal Oil & Gas Corporation to provide a safe and healthful work environment for all of its employees as well as contractors that may work on Coastal leases. Coastal Oil & Gas Corporation makes a continued effort to comply with laws and regulations relative to worker health and safety, and to manage all operations in a manner to reduce risk.

The following is a H<sub>2</sub>S contingency plan for the Coastal NBU #347 well. The plan is designed specifically for personnel working on this project and provides detailed procedures to follow in case of an accidental release of hydrogen sulfide. In order for the plan to be effective, all personnel must review and be familiar with their responsibilities as well as the safety equipment involved.

The purpose of this plan is to act as a guideline for personnel working on the wellsite in the event of a sudden release of hydrogen sulfide. All personnel working on the wellsite as well as service personnel that may travel to location on an unscheduled basis must be familiar with this program. The cooperation and participation of all personnel involved with the drilling operation is necessary for this plan to be effective.

## **1. Responsibilities and Duties**

In order to assure proper execution of the contingency plan, it is essential that one person be responsible for and in complete charge of implementing the procedures outlined in this plan. The order of Responsibility will be as follows:

1. Coastal Oil & Gas Corporation drilling representative on location - if unable to perform his / her duties
2. Alternate Coastal Oil & Gas Corporation representative - if unable to perform his / her duties
3. Rig Toolpusher / Supervisor - if unable to perform his / her duties
4. Safety consultant representative - if available

### **A. All Personnel**

1. Always be alert for possible H<sub>2</sub>S alarms - both audible and visual.
2. Be familiar with location of Safe Briefing Areas (SBA) and protective breathing equipment.
3. Develop a "wind awareness". Be aware of prevailing wind direction as well as nearby uphill areas, should there be no wind.
4. Familiarize yourself with nearest escape routes for safe evacuation.
5. Should H<sub>2</sub>S alarms sound, DON'T PANIC - Remain calm and follow the instructions of person in charge.
6. If the H<sub>2</sub>S alarms sound:
  - a. Essential personnel shall don the appropriate respiratory protective equipment and follow company procedures. Essential personnel will continue to wear respiratory protective equipment until the area is deemed safe (H<sub>2</sub>S concentration less than 10 PPM)
  - b. Non-essential personnel shall evacuate to the appropriate safe briefing area using escape breathing systems. Wait there for further instructions from the Coastal drilling representative.

- c. Initiate rescue protocol if necessary, following training procedures.

## **B. Drilling Foreman**

2. The Coastal drilling foreman will confirm that all personnel on location are trained in H<sub>2</sub>S safety and aware of the above list of duties at the point in time when the H<sub>2</sub>S plan becomes effective at 300 feet above the Uintah Formation.
2. The Coastal foreman will ensure that all safety and emergency procedures are observed by all personnel.
3. The Coastal foreman will make an effort to keep the number of personnel on location to a minimum and to ensure that only essential personnel are on location during critical operations.
4. Should any extreme danger condition exist, the Coastal foreman will:
  - b. Assess the situation and advise all personnel by appropriate means of communication.
  - b. Be responsible for determining that the extreme danger condition is warranted and the red flag shall be posted at location entrance.
  - c. Go to safe briefing area and give clear instructions relative to the hazard on location, and actions for personnel to follow.
  - d. Notify company and regulatory groups of the current situation as outlined in company protocol.
  - e. Proceed to the rig floor and supervise operations with the Rig Supervisor. Take action to control and reduce the H<sub>2</sub>S hazard.
  - f. Ensure that essential personnel are properly protected with supplied air breathing equipment and that non-essential personnel are in a "poison gas free" area.
  - g. Be responsible for authorizing evacuation of persons / residents in the area surrounding the drilling location.
  - h. Commence any ignition procedures if ignition criteria are met.

### **C. Rig Supervisor - Toolpusher**

3. If the Coastal Drilling Foreman is unable to perform his / her duties, and the alternate Drilling Foreman is also unable or unavailable to perform his / her duties, the drilling rig Toolpusher will assume command of wellsite operations and all responsibilities listed above for drilling foreman.
2. Ensure that all rig personnel are properly trained to work in H<sub>2</sub>S environments and fully understand the purpose of the H<sub>2</sub>S alarms and actions to take when alarms activate. Ensure that all crew personnel understand the buddy system, safe briefing areas, and individual duties as well as emergency evacuation procedures.
3. Should an extreme danger operational condition arise, the rig Toolpusher shall assist the Coastal foreman by:
  - c. Proceeding to the rig floor and assist in supervising rig operations.
  - b. Ensure that only essential working personnel remain in hazardous areas.
  - c. Ensure that all crew members that remain in hazardous area wear respiratory protective equipment until notified that area is "clear" of any toxic gases.
  - d. Assign rig crew member or other service representative to block the entrance to location. No unauthorized personnel will be allowed entry to location.
  - e. Help to determine hazardous "danger zones" on location using portable detection equipment and position electric fans to move gas in any high concentration areas.

### **D. Safety Consultant**

4. During normal operations (no H<sub>2</sub>S present), the Safety Consultant will be responsible for the following:
  - d. Ensure that all wellsite safety equipment is in place and operational.
  - b. Ensure that all wellsite personnel are familiar with the location safety layout and operation of all safety equipment.

- c. Assist the Coastal foreman in performing weekly H<sub>2</sub>S drills for location personnel.
2. When an operational condition is classified as extreme danger, the Safety Consultant will be responsible for the following:
- e. Account for all wellsite personnel.
  - b. Assess any injuries and direct first aid measure.
  - c. Ensure that all safety and monitoring equipment is functioning properly and available.
  - d. Monitor the safety of wellsite personnel
  - e. Maintain a close communication with Coastal Foreman.
  - f. Be prepared to assist Coastal Foreman with support for rig crew or other personnel using breathing equipment.
  - g. Be prepared to assist Coastal Foreman with emergency procedures including possible well ignition.
  - h. Be prepared to assist with evacuation of any area residents or other personnel working in the immediate area.

## 2. Drilling Rig Layout

### E. Location

3. All respiratory protective equipment and H<sub>2</sub>S detection equipment will be rigged up 3 days or 500 feet prior to entering the first zone suspected to contain hydrogen sulfide. The rig crews and other service personnel will be trained at this time.
2. The drilling rig will be situated on location to allow for the prevailing winds to blow across the rig toward the circulation tanks or at right angles to the lines from the B.O.P.s to the circulation tanks.
3. The entrance to the location is designed so that it can be barricaded if a hydrogen sulfide emergency condition arises. An auxiliary exit route will be available so that in case of an emergency, a shift in wind direction would not prevent escape from the location.
4. A minimum of 2 safe briefing areas (SBA) shall be designated for assembly of personnel during emergency conditions. These will be located at least 150 feet, or as practical, from the wellbore and in such a location that at least one area will be upwind of the well at all times. Upon recognition of an emergency situation, all personnel will be trained to assemble at the designated briefing area for instructions.
5. Smoking areas will be established and "No Smoking" signs will be posted around the location.
6. Reliable 24 hour radio and telephone communications will be available at the Drilling Foremen's office.
7. A mud-gas separator will be rigged up and manifolded to the choke system.
8. All equipment that might come into contact with hydrogen sulfide, including drill pipe, drill stem test tools, blowout preventers, casing, and the choke system, will meet Coastal's metallurgy requirements for H<sub>2</sub>S service.
9. The drilling rig will have a continuous electronic H<sub>2</sub>S detection system that automatically will activate visible and audible alarms if hydrogen sulfide is detected. The visible light will activate if 10 PPM H<sub>2</sub>S is present. The audible siren will activate if 15 PPM or higher concentration is present. There will be at least 4 H<sub>2</sub>S sensors in place on the drilling rig. They will be located to detect the presence of

hydrogen sulfide in areas where it is most likely to come to the surface. The sensor head locations will be: 1) rig floor by driller's console, 2) substructure area near the bell nipple, 3) the shale shaker, 4) the mud mixing area. Additional sensors will be positioned at the discretion of the Drilling Foreman. At least 1 light and 1 siren will be placed on the rig to indicate the presence of hydrogen sulfide. The light and siren will be strategically placed to be visible to all personnel on the drill site. Additional alarm lights & sirens may be added to ensure that all personnel on the drill site are able to notice the alarms at any time.

10. The H<sub>2</sub>S detection equipment will be calibrated as recommended by the manufacturer. Calibration records will be maintained on location.
11. At least 4 windsocks will be placed around the drill site to ensure that wind direction can be readily determined by everyone on the drilling location. One windsock will be mounted on or near the rig floor to be readily visible to rig crews when tripping pipe.
12. All respiratory protective equipment will be NIOSH/MSHA approved positive pressure type and maintained according to manufacturer's guidelines. All breathing air used for this equipment will be CGA type Grade D breathing air. Battery powered voice mikes will be available for communication when wearing masks.
13. Both 30 minute self-contained breathing apparatuses (SCBA) and workline units with escape cylinders will be available on location. There will be sufficient numbers of this supplied air breathing equipment on location to ensure that all personnel on location have 1 piece of equipment available to them. All Respiratory protective equipment will use nose cups to prevent fogging in temperatures below 32 F. Spectacle kits will be available for personnel that require corrective lenses when working under mask.
14. Electric explosion-proof ventilating fans (bug blowers) will be available to provide air movement in enclosed areas where gas might accumulate.
15. H<sub>2</sub>S drills will be conducted at least weekly to ensure that all well site personnel are competent in emergency donning procedures. These drills will be recorded in the driller's log.

### **3. Safety Procedures**

#### **A. Training**

All personnel who come onto the drilling location must be properly trained in hydrogen sulfide, nitrogen, and oxygen deficient atmosphere safety. The personnel shall carry documentation with them indicating that the training has occurred within the previous 12 months.

Training topics shall include at a minimum:

1. Hazards and characteristics of hydrogen sulfide, nitrogen, and oxygen deficient atmospheres and symptoms of exposure to these gases.
2. Proper use, care and limitations of respiratory protective equipment with hands on practice.
3. Use of both fixed and portable toxic gas detection equipment.
4. Work practices to reduce opportunities for toxic gas exposure as well as confined space procedures.
5. First aid for toxic gas exposure and resuscitation equipment.
6. The buddy system
7. Emergency evacuation procedures
8. A review of the contingency plan for the well.

#### **B. Operating Conditions**

A three color flag warning system will be used to notify personnel approaching the drill site as to operating conditions on the wellsite. This system is in compliance with BLM Operating Order #6 and follows industry standards.

Green Flag - Potential Danger

Yellow Flag - Moderate Danger

Red Flag - Extreme Danger - Do Not approach if red flag is flying.

### C. Evacuation Plan

There are no permanent residents within a 1 mile radius of the drill site. Coastal Oil & Gas Corporation has operations within this area and travel the roads in the immediate area.

### D. Emergency Rescue Procedures

Wellsite personnel should not attempt emergency rescues unless they have been properly trained. A trained person who discovers another person overcome by hydrogen sulfide should **not attempt to rescue without donning the proper breathing equipment**. When making an emergency rescue always use the following procedures:

1. Don rescue breathing equipment before attempting to rescue someone.
2. Remove the victim from the contaminated area to an area free of toxic gas by traveling upwind or cross wind. Be certain that you are in a safe area before removing your breathing equipment.
3. If the victim is not breathing, initiate mouth - to - mouth resuscitation immediately. Follow CPR guidelines and replace mouth to mouth with a bag mask resuscitator if available.
4. Treat the victim for shock, keeping the victim warm and calm. Never leave the victim alone.
5. Any personnel who experience hydrogen sulfide exposure must be taken to a hospital for examination and their supervisor notified of the incident.
6. Their supervisor shall follow the company Emergency Preparedness plan.

#### 4. H<sub>2</sub>S Safety Equipment on Drilling Location

Item	Amount	Description
1.	One (1)	Safety trailer with a cascade system of 10-300 cu. ft bottles of compressed breathing air complete with high pressure regulators.
2.	At least 1000 ft.	Low pressure airline equipped with Hansen locking fittings. This airline will be rigged up with manifolds to supply breathing air to the rig floor, substructure, derrick, shale shaker area, and mud mixing areas. Three high pressure refill hoses will be attached to cascade systems for cylinder refill.
3.	Twelve (12)	Scott 30 minute self contained breathing apparatuses (SCBA).
4.	Twelve (12)	Scott airline units with emergency escape cylinders.
5.	One (1)	4 - channel continuous electronic H <sub>2</sub> S monitor with audible and visual alarms. The set points for these alarms are 10 PPM for the low alarm and 15 PPM for the high alarm.
6.	Two (2)	Sensidyne portable hand operated pump type detection units with tubes for hydrogen sulfide and sulfur dioxide.
7.	One (1)	Oxygen resuscitator with spare oxygen cylinder.
8.	One (1)	Trauma first aid kit.
9.	One (1)	Stokes stretcher and one (1) KED.
10.	Four (4)	Wind socks.
11.	At least one (1)	Well condition sign with 3 flag system.
12.	Two (2)	Safe Briefing Area (SBA) signs.
13.	One (1)	Fire blanket.
14.	One (1)	Set air splints.

- |     |           |   |
|-----|-----------|---|
| 15. | Two (2)   | Electric explosion proof fans.  |
| 16. | One (1)   | Bullhorn and chalk board.   |
| 17. | Three (3) | 300 cu. ft. air bottles for the safe briefing area.                   |
| 18. | Two (2)   | 30 pound fire extinguishers.  |
| 19. | Six (6)   | Battery powered voice mikes for communication when wearing air masks. |
| 20. | One (1)   | Battery powered combustible gas meter.                                |

**Insert drilling location map showing placement of safety equipment.**

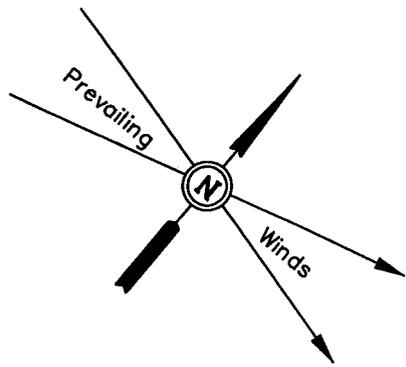
COASTAL OIL & GAS CORP.

LOCATION LAYOUT TO ACCOMPANY  
H<sub>2</sub>S CONTINGENCY PLAN

NBU #347

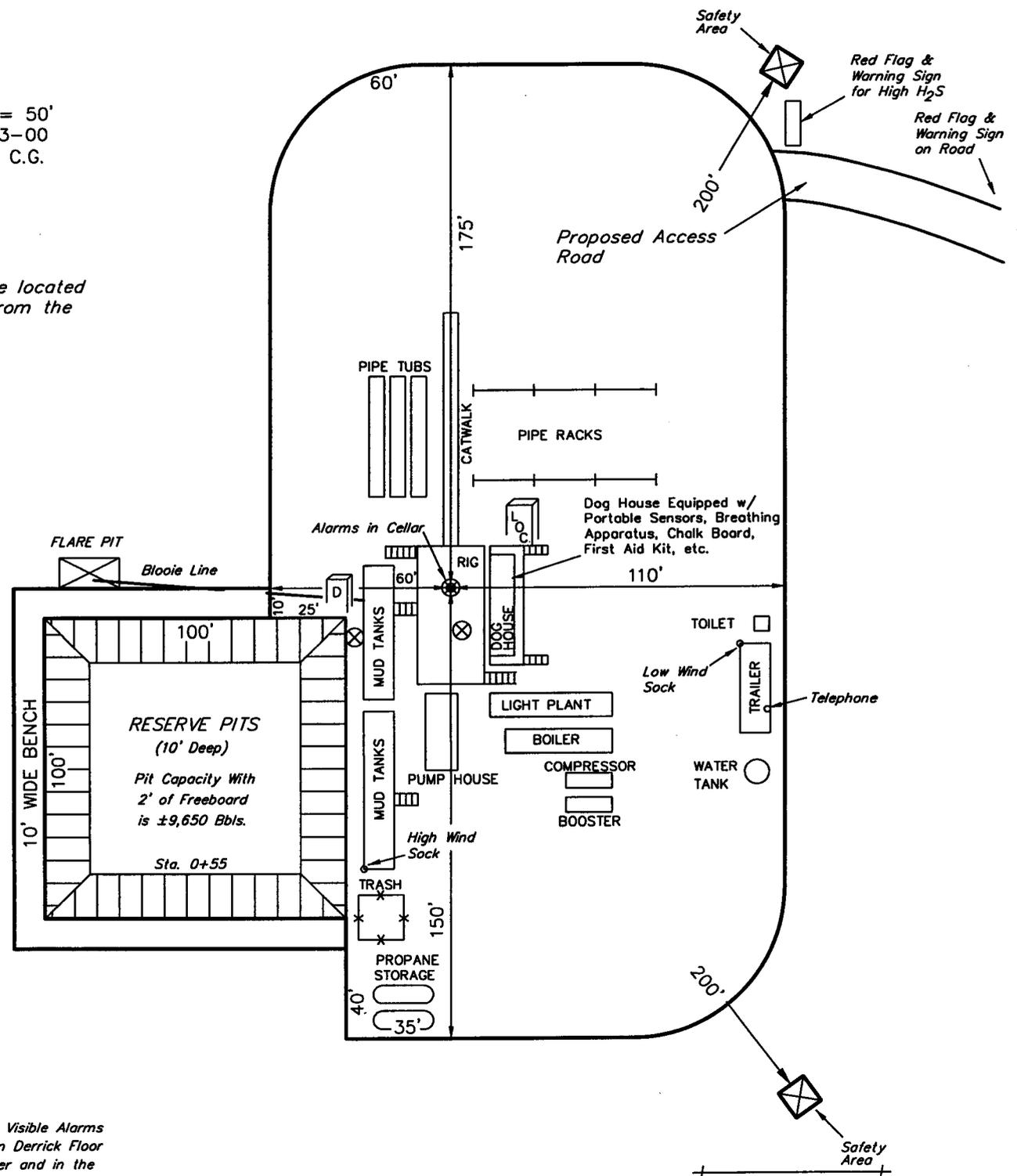
SECTION 11, T10S, R22E, S.L.B.&M.

1697' FSL 411' FWL



SCALE: 1" = 50'  
DATE: 11-3-00  
Drawn By: C.G.

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



⊗ = Audible & Visible Alarms  
Located on Derrick Floor  
Shale Skaler and in the  
Cellar.

FIGURE #3

## 5. Well Ignition Procedures

If it should become apparent that an uncontrolled release of hydrogen sulfide to the atmosphere may endanger the health and safety of the public or well site personnel, the Coastal drilling foreman will make a decision to ignite the well. The following procedure should be followed before attempting to ignite the well.

**A. Ignition Equipment** - the following equipment will be available on-site for use by the ignition team.

1. 2-12-gauge flare guns with flare shells.
2. 2-500 ft. fire resistant retrieval ropes.
3. 1 portable combustible gas meter.
4. Self contained breathing apparatus (SCBA) for each member of the ignition team.
5. 1 backup vehicle with communications equipment.

### **B. Ignition Procedures**

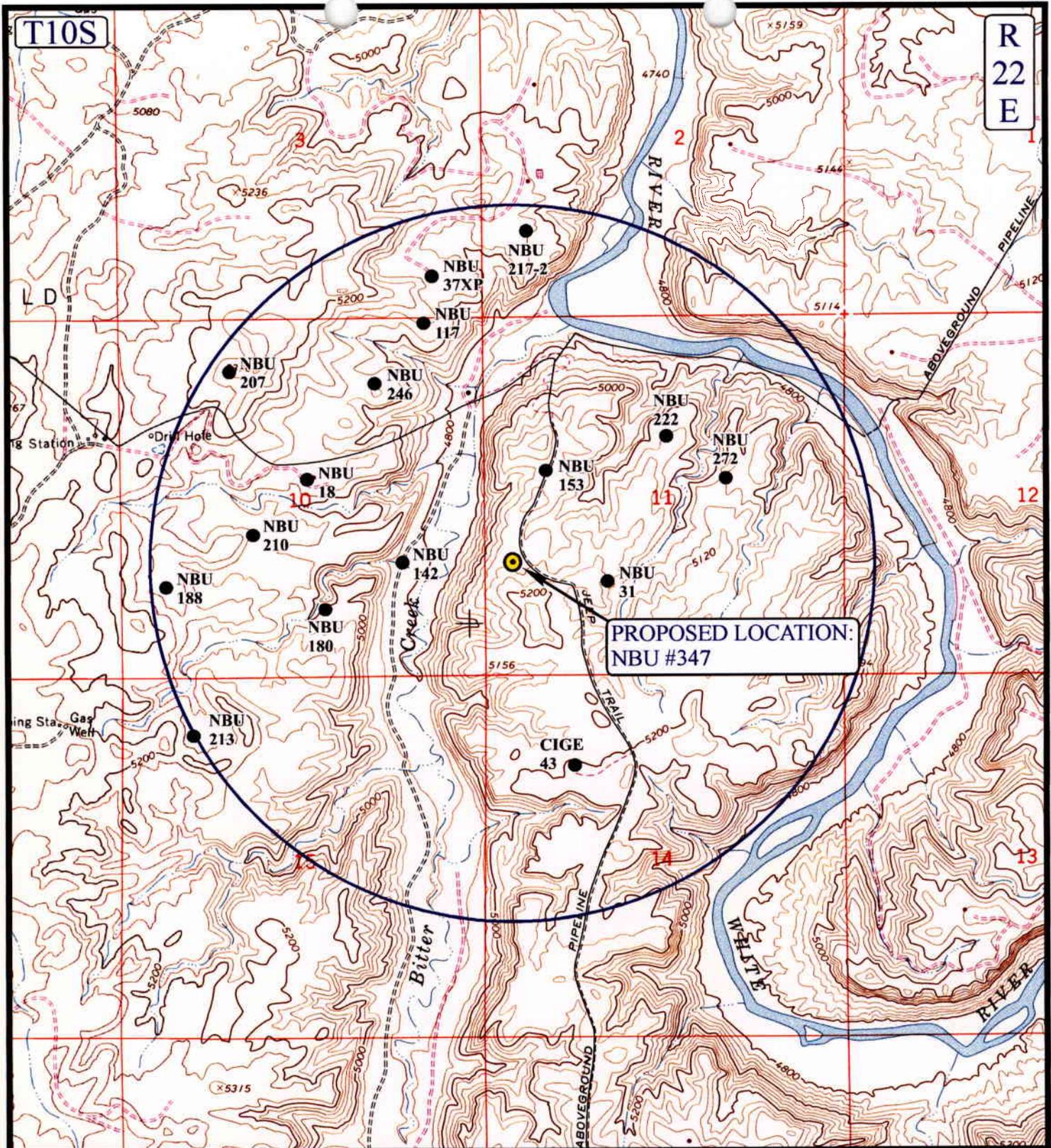
1. The Coastal drilling foreman will ensure that well site personnel are evacuated to a safe area upwind of the well bore prior to any ignition action.
2. The Coastal foreman and a designated partner "buddy" backed up by well site safety personnel will comprise the ignition team. All team members will be wearing 30 minute SCBAs.
3. The backup crew will be positioned near a radio equipped vehicle at a safe distance from the sour gas release. They will standby to rescue the actual team igniting the well.
4. The partner of the ignition team will carry a combustible gas / hydrogen sulfide meter to continuously monitor the area in which they are working and define the perimeter of the gas cloud.
5. The Coastal foreman will carry the flare gun and shells.
6. The ignition team will determine the hazardous area and establish safe working perimeters. Once this is identified the team will proceed

upwind of the leak and fire into the area with flare gun. If trouble is encountered in trying to light the leak, retry to ignite by firing the flare shells at 45 and 90 degree angles to the gas source, but DO NOT approach closer to the leak.

7. After ignition, monitor for sulfur dioxide and work with the support group to restrict access to the contaminated area.

## **6. Residents & General Public Within the Radius Of Exposure**

There are no residents within a one mile radius of the well site. Coastal Oil & Gas Corporation operates other wells within a one mile radius. Coastal personnel could be working in the area at any time of day.



**PROPOSED LOCATION:  
NBU #347**

**LEGEND:**

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

**COASTAL OIL & GAS CORP.**

**NBU #347**  
**SECTION 11, T10S, R22E, S.L.B.&M.**  
**1697' FSL 411' FWL**



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

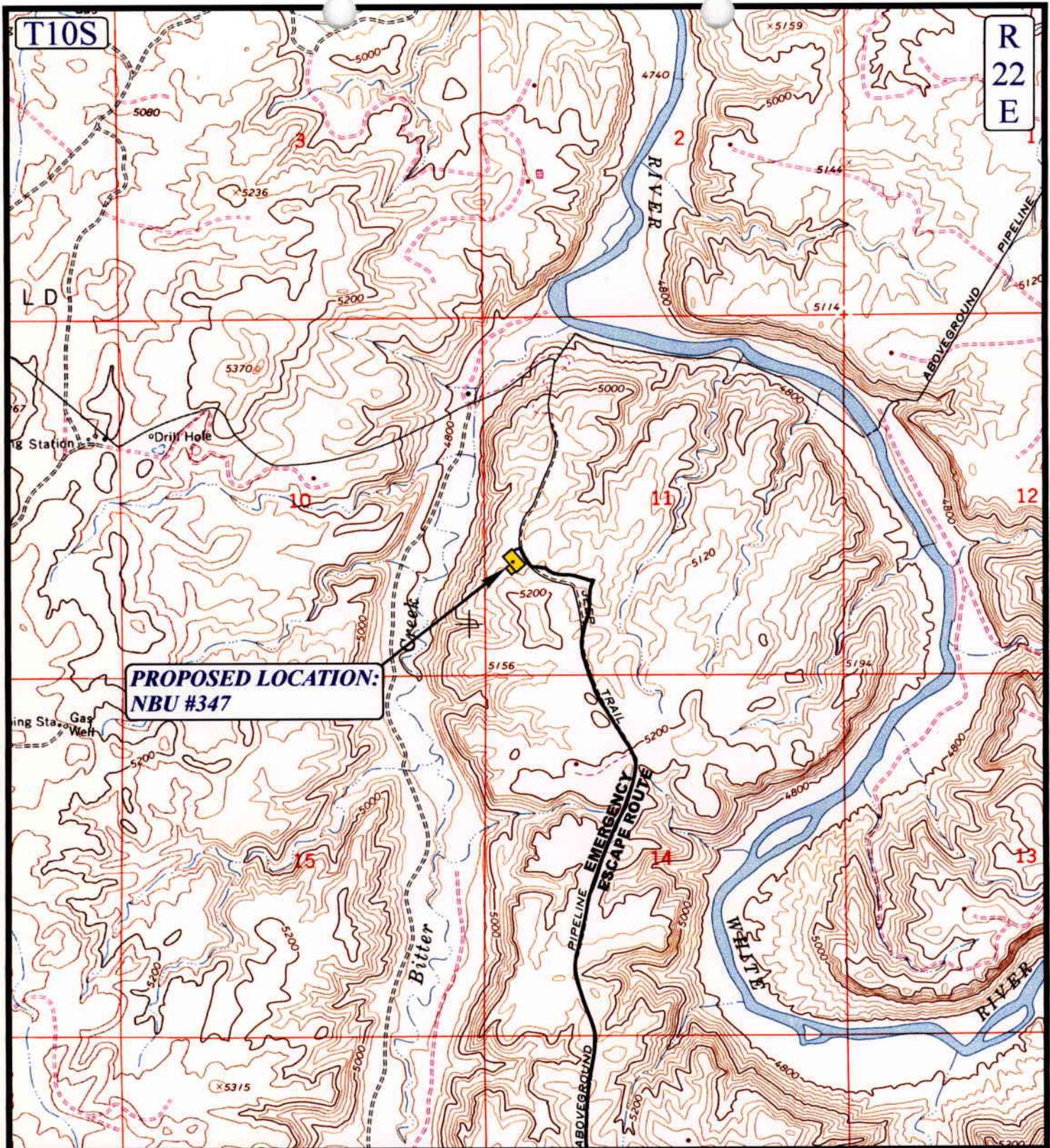


**TOPOGRAPHIC  
MAP**

**10 19 98**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00





**PROPOSED LOCATION:  
NBU #347**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING ROAD

**COASTAL OIL & GAS CORP.**

NBU #347  
SECTION 11, T10S, R22E, S.L.B.&M.  
1697' FSL 411' FWL



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

**TOPOGRAPHIC  
MAP**

**11 3 00**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: K.G. REVISED: 00-00-00



## 7. Emergency Phone Directory

### A. Coastal Oil & Gas Corporation

1368 South 1200 East  
 Vernal, UT 84078  
 800-877-3933

Title	Name	Phone
Utah Production Manager	Sam Prutch	O 435-781-4486
		H 435-781-0166
		M 435-489-2154
Production Superintendent	Paul Breshears	O 435-789-4433
		H 435-789-8877
		M 435-823-7436
		M 435-790-4433
Drilling	Larry Tavegia	H 435-789-1717
		M 435-828-7255
Drilling	Scott Seelly	H 435-789-1101
		M 435-828-1101
Vice President-Production Rocky Mt. District	Dwayne Jamal	O 713-877-7527
Senior Environmental Coord. Rocky Mt. District	Deborah Harris	O 435-781-7048
		H 435-781-8099
		M 453-828-6514
Senior Environmental Activity Coord. Rocky Mt. District	Carroll Estes	O 435-751-7009
		H 435-789-3301
		M 435-828-3301
Director Environmental & Safety Affairs - Houston, TX	Mike McAllister	800-877-3933
		O 713-877-6590
		H 713-469-5789
Colorado Interstate Gas Co.	Ron Carpenter	H 435-789-0455
		M 435-828-7926

**B. Emergency Services Phone List**

1. Ashley Valley Medical Center - Vernal, UT .....435-789-3342
2. Ambulance Services - Uintah County, UT .....911
3. Sheriff Department - Uintah County, UT .....435-789-4222
4. Highway Patrol - Utah .....800-222-0038
5. Fire Department - Uintah County, UT .....435-789-2511
6. Utah Division Oil & Gas - Salt Lake City, UT .....801-538-5277
7. Medical Helicopter - Air Med- Salt Lake City, UT .....800-453-0120

## 8. Properties of Gases

If gas should be produced, it could be a mixture of carbon dioxide, hydrogen sulfide, and methane.

### TOXICITY OF VARIOUS GASES

Common Name	Specific Chemical Formula	Gravity (Air = 1)	Threshold Limit <sup>1</sup>	Hazardous Limit <sup>2</sup>	Lethal Concern <sup>3</sup>
Hydrogen Sulfide	H <sub>2</sub> S	1.18	10 ppm	250 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21	5 ppm	--	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO <sub>2</sub>	1.52	5000 ppm	5%	10%
Methane	CH <sub>4</sub>	0.55	90000 ppm above 5% in Air	Combustible	--

1. **Threshold** - Concentration at which it is believed that all workers may repeatedly be exposed, day after day, without adverse side effects.
2. **Hazardous** - Concentration that may cause death.
3. **Lethal** - Concentration that will cause death with short-term exposure

## 1. Hydrogen Sulfide

### General Properties

Hydrogen sulfide is a colorless and transparent gas and is flammable. It is heavier than air and, hence, may accumulate in low places.

Although the slightest presence of H<sub>2</sub>S in the air is normally detectable by its characteristic "rotten egg" odor, it is dangerous to rely on the odor as a means of detecting excessive concentrations because the sense of smell is rapidly lost, allowing lethal concentrations to be accumulated without warning. The following table indicates the poisonous nature of hydrogen sulfide, which is more toxic than carbon monoxide.

Common names: sour gas, acid gas, rotten egg gas, sulphur gas, sulphurated gas, sweet gas (H<sub>2</sub>S is a sweet tasting gas, but often the word "tasting" is left out).

### Physical - Chemical Properties

Chemical Formula	H <sub>2</sub> S
1. Specific Gravity (air = 1.000)	1.193 (@ 77 F)
2. Color	None
3. Odor	Compare to rotten eggs
4. Odor Threshold	0.13 part of 1 ppm
5. Corrosivity	Reacts with metals, plastics, tissues and nerves.
6. Solubility in Water	4.0 to 1 in H <sub>2</sub> O @ 32 F 2.6 to 1 in H <sub>2</sub> O @ 68 F
7. Effects on Humans	Olfactory nerves, respiratory nerves, irritates sensitive membranes in eyes, nose, and throat.
8. Vapor Pressure	19.6 atmospheres at 25 C
9. Explosive Limits	4.3% to 46% by volume in air

10. Ignition Temperature	500E F (burns with a pale flame)
11. Molecular Weight	34.08
12. Conversion Factors	1 mg / 1 of air = 717 ppm (at 25 C and 760 mm HG). 1 ppm = 0.00139 mg / 1 of air
13. pH	3 in water

### **Industrial Occurrences**

Hydrogen Sulfide exposures occur in certain processes in the petroleum industry, chemical plants, chemical laboratories, sulfur and gypsum mines, viscose rayon and rubber industries, tanneries, and in the manufacture of some chemicals, dyes and pigments. It may be encountered in excavations in swampy or filled ground. It is produced when sulfur-containing organic matter decomposes, and it can therefore be found in sewage or organic-waste treatment plants. A common sewer gas, it may find its way into utility manholes, particularly dangerous when encountered in tanks, vessels, and other enclosed spaces.

### **Toxic Properties**

Hydrogen Sulfide is an extremely toxic and irritating gas. Free Hydrogen Sulfide in the blood reduces its oxygen-carrying capacity, thereby depressing the nervous system. Sufficiently high concentrations cause blocking of the phrenic nerve, resulting in immediate collapse and death due to respiratory failure and asphyxiation.

Because Hydrogen Sulfide is oxidized quite rapidly to sulfates in the body, no permanent after effects occur in cases of recovery from acute exposures unless oxygen deprivation of the nervous system is prolonged. However, in cases of acute exposures, there is always the possibility that pulmonary edema may develop. It is also reported that symptoms such as nervousness, dry nonproductive coughing, nausea, headache, and insomnia, lasting up to about three days, have occurred after acute exposures to Hydrogen Sulfide.

At low concentrations the predominant effect of Hydrogen Sulfide is on the eyes and respiratory tract. Eye irritation, conjunctivitis, pain, lacrimation, keratitis, and photophobia may persist for several days. Respiratory tract

symptoms include coughing, painful breathing, and pain in the nose and throat.

There is no evidence that repeated exposures to Hydrogen Sulfide result in accumulative or systemic poisoning. Effects such as eye irritation, respiratory tract irritation, slow pulse rate, lassitude, digestive disturbances, and cold sweats may occur, but these symptoms disappear in a relatively short time after removal from the exposure. Repeated exposures to Hydrogen Sulfide do not appear to cause any increase or decrease in susceptibility to this gas.

The paralytic effect of Hydrogen Sulfide on the olfactory nerve is probably the most significant property of the gas. This paralysis may create a false sense of security. A worker can be overcome after the typical rotten-egg odor has disappeared. Rather than the characteristic Hydrogen Sulfide odor, some victims of sudden acute overexposure have reported a brief, sickeningly sweet odor just prior to unconsciousness.

Subjective olfactory responses to various concentrations of Hydrogen Sulfide have been summarized as follows:

0.02 ppm .....	No Odor
0.13 ppm.....	Minimal perceptible odor
0.77 ppm.....	Faint, but readily perceptible odor
4.60 ppm.....	Easily detectable, moderate odor
27.0 ppm.....	Strong, unpleasant odor, but not intolerable

Physiological responses to various concentrations of Hydrogen Sulfide have been reported as follows:

10 ppm	Beginning eye irritation
50-100 ppm	Slight conjunctivitis and respiratory tract irritation after 1 hour exposure.

	100 ppm	Coughing, eye irritation, loss of sense of smell after 2-15 minutes. Altered respiration, pain in the eyes, and drowsiness after 15-30 minutes, followed by throat irritation after 1 hour. Several hours' exposure results in gradual increase in severity of these symptoms and death may occur within the next 48 hours.
	200-300 ppm	Marked conjunctivitis and respiratory tract irritation after 1 hour of exposure.
	500-700 ppm	Loss of consciousness and possibility of death in 30 minutes to 1 hour.
	700-1000 ppm	Rapid unconsciousness, cessation of respiration, and death.
	1000-2000 ppm	Unconsciousness at once, with early cessation of respiration and death in a few minutes. Death may occur even if individual is removed to fresh air at once.

### **Acceptable Concentrations**

#### **Acceptable Eight-Hour Time-Weighted Average**

To avoid discomfort, the time-weighted average concentration of Hydrogen Sulfide shall not exceed 10 ppm.

#### **Acceptable Ceiling Concentrations**

The acceptable concentration for protection of health for an eight-hour, five-day week shall be 20 ppm. Fluctuations are to occur below this concentration.

#### **Acceptable Maximum for Peaks Above Acceptable Base Line for Continuous Exposure**

A single-peak concentration not exceeding 50 ppm for a maximum of 10 minutes is allowable provided that the daily time-weighted average is not exceeded.

## H<sub>2</sub>S Equivalents

<u>Parts per Million</u>	<u>Percent</u>	<u>Grains per 100 cu. ft.</u>
1	.0001	.055
10	.001	.55
18	.0018	1.0
100	.01	5.5
1000	.1	55.5
10000	1.0	555.5

Grains per 100 cu. ft. = % by volume Mole 636.4 1% by volume = 10,000 ppm

## B. Sulfur Dioxide

Sulfur Dioxide (SO<sub>2</sub>) is a colorless, transparent gas and is non-flammable.

Sulfur Dioxide is produced during the burning of H<sub>2</sub>S. Although SO<sub>2</sub> is heavier than air, it will be picked up by a breeze and carried downwind at elevated temperatures. While Sulfur Dioxide is extremely irritating to the eyes and mucous membranes of the upper respiratory tract, it has exceptionally good warning powers in this respect.

### Physical - Chemical Properties

Chemical Formula	SO <sub>2</sub>
1. Specific Gravity (air = 1.000)	2.212
2. Color	None
3. Flammable	No
4. Odor	Characteristic, pungent, gives ample warning of its presence.
5. Corrosivity	Dry – not corrosive to ordinary metals Wet – corrosive to most common metals
6. Allowable Concentrations	5 ppm (ACGIH) 5 ppm (OSHA)
7. Effects on Humans	Irritates eyes, throat and upper respiratory system

## Concentrations & Effects

<u>%SO<sub>2</sub></u>	<u>ppm</u>	<u>Effects</u>
0.0005	5	Pungent odor-normally a person can detect SO <sub>2</sub> in this range.
0.001	10	Safe for eight (8) hour exposure.
0.0012	12	Throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes.
0.015	150	So irritating that it can only be endured for a few minutes.
0.05	500	Causes a sense of suffocation, even with the first breath.

## Toxic Properties

Sulfur Dioxide is an irritating gas in its vapor form and the odor is so intensely irritating that concentrations of 3 to 5 parts per million in the air are readily detectable by the normal person. In higher concentrations, the severely irritating effect of the gas makes it unlikely that any person would be able to remain in a Sulfur Dioxide contaminated atmosphere unless he were unconscious or trapped.

Sulfur Dioxide gas is intensely irritating to the eyes, throat, and upper respiratory system. Inhalation of this gas in concentrations of 8 to 12 parts per million in air causes throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes. 150 parts per million is so extremely irritating that it can be endured only for a few minutes. 500 parts per million is so acutely irritating to the upper respiratory tract that it causes a sense of suffocation, even with the first breath.

Out of numerous reported exposures to Sulfur Dioxide, there are few references that would indicate pneumonia as an after effect.



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor  
Kathleen Clarke  
Executive Director  
Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

November 13, 2000

Coastal Oil and Gas Corporation  
PO Box 1148  
Vernal, UT 84078

Re: Natural Buttes Unit 347 Well, 1697' FSL, 411' FWL, NW SW, Sec. 11, T. 10 South,  
R. 22 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 43-047-33709.

Sincerely,

for

John R. Baza  
Associate Director

er

Enclosures

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

**Operator:** Coastal Oil and Gas Corporation  
**Well Name & Number** Natural Buttes Unit 347  
**API Number:** 43-047-33709  
**Lease:** U-01197-A-ST

**Location:** NW SW                      **Sec.** 11                      **T.** 10 South                      **R.** 22 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**  
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:
  - 24 hours prior to cementing or testing casing
  - 24 hours prior to testing blowout prevention equipment
  - 24 hours prior to spudding the well
  - within 24 hours of any emergency changes made to the approved drilling program
  - prior to commencing operations to plug and abandon the well

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

  - Dan Jarvis at (801) 538-5338
  - Carol Daniels at (801) 538-5284 (spud)
  
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. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
  
5. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
  
6. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER:
2. NAME OF OPERATOR: El Paso Production Oil & Gas Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR: 8 South 1200 East CITY Vernal STATE Utah ZIP 84078		7. UNIT or CA AGREEMENT NAME:
PHONE NUMBER: 435-789-4433		8. WELL NAME and NUMBER: Exhibit "A"
4. LOCATION OF WELL		9. API NUMBER:
FOOTAGES AT SURFACE:		10. FIELD AND POOL, OR WILDCAT:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		COUNTY:
		STATE: UTAH

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

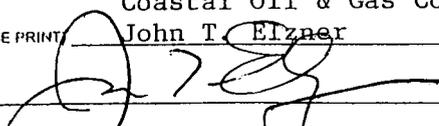
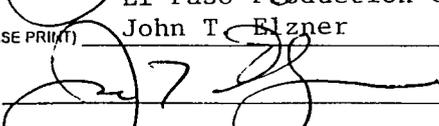
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> 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"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<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>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.

As a result of the merger between The Coastal Corporation and a wholly owned subsidiary of El Paso Energy Corporation, the name of Coastal Oil & Gas Corporation has been changed to El Paso Production Oil & Gas Company effective March 9, 2001.

See Exhibit "A"

Bond # 400JU0708

Coastal Oil & Gas Corporation	
NAME (PLEASE PRINT) <u>John T. Elzner</u>	TITLE <u>Vice President</u>
SIGNATURE 	DATE <u>06-15-01</u>
El Paso Production Oil & Gas Company	
NAME (PLEASE PRINT) <u>John T. Elzner</u>	TITLE <u>Vice President</u>
SIGNATURE 	DATE <u>06-15-01</u>

(This space for State use only)

**RECEIVED**  
JUN 19 2001

State of Delaware  
Office of the Secretary of State

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PAGE 1

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "COASTAL OIL & GAS CORPORATION", CHANGING ITS NAME FROM "COASTAL OIL & GAS CORPORATION" TO "EL PASO PRODUCTION OIL & GAS COMPANY", FILED IN THIS OFFICE ON THE NINTH DAY OF MARCH, A.D. 2001, AT 11 O'CLOCK A.M.

RECEIVED

MAR 9 2001

DIVISION OF  
OIL, GAS AND MINING



*Harriet Smith Windsor*  
Harriet Smith Windsor, Secretary of State

0610204 8100

AUTHENTICATION: 1061007

010162788

DATE: 04-03-01

CERTIFICATE OF AMENDMENT

OF

CERTIFICATE OF INCORPORATION

COASTAL OIL & GAS CORPORATION (the "Company"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That the Board of Directors of the Company, by the unanimous written consent of its members, filed with the minutes of the Board, adopted a resolution proposing and declaring advisable the following amendment to the Certificate of Incorporation of the Company:

RESOLVED that it is deemed advisable that the Certificate of Incorporation of this Company be amended, and that said Certificate of Incorporation be so amended, by changing the Article thereof numbered "FIRST." so that, as amended, said Article shall be and read as follows:

"FIRST. The name of the corporation is El Paso Production Oil & Gas Company."

SECOND: That in lieu of a meeting and vote of stockholders, the stockholders entitled to vote have given unanimous written consent to said amendment in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware.

THIRD: That the aforesaid amendment was duly adopted in accordance with the applicable provisions of Sections 242 and 228 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, said COASTAL OIL & GAS CORPORATION has caused this certificate to be signed on its behalf by a Vice President and attested by an Assistant Secretary, this 9th day of March 2001.

COASTAL OIL & GAS CORPORATION

*David L. Siddall*  
David L. Siddall  
Vice President

Attest:

*Margaret E. Roark*  
Margaret E. Roark, Assistant Secretary

RECEIVED

STATE OF DELAWARE  
SECRETARY OF STATE  
DIVISION OF CORPORATIONS  
FILED 11:00 AM 03/09/2001  
010118394 - 0610204

JUN 19 2001

DIVISION OF  
OIL, GAS AND MINING



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

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

**RECEIVED**

JUL 12 2001

DIVISION OF  
OIL, GAS AND MINING

In Reply Refer To:  
3106  
UTSL-065841  
(UT-924)

JUL 10 2001

### NOTICE

El Paso Production Oil & Gas Company : Oil and Gas  
Nine Greenway Plaza :  
Houston TX 77046-0095 :

#### Name Change Recognized

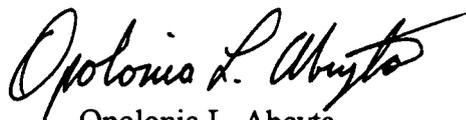
Acceptable evidence has been received in this office concerning the name change of Coastal Oil & Gas Corporation into El Paso Production Oil & Gas Company with El Paso Production Oil & Gas Company being the surviving entity.

For our purposes, the name change is recognized effective March 9, 2001.

The oil and gas lease files identified on the enclosed exhibit have been noted as to the name change. The exhibit was compiled from a list of leases obtained from our computer program. We have not abstracted the lease files to determine if the entities affected by this name change hold an interest in the leases identified nor have we attempted to identify leases where the entities are the operator on the ground maintaining no vested recorded title or operating rights interests. We will be notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice. If additional documentation for changes of operator are required by our Field Offices, you will be contacted by them.

If you identify additional leases in which the entities maintain an interest, please contact this office and we will appropriately document those files with a copy of this Notice.

Due to the name change, the name of the principal/obligor on the bond is required to be changed from Coastal Oil & Gas Corporation to El Paso Production Oil & Gas Company. You may accomplish this either by consent of surety rider on the original bond or a rider to the original bond. The bonds are held in Wyoming and Colorado.



Opolonia L. Abeyta  
Acting Chief, Branch of  
Minerals Adjudication

Enclosure

1. Exhibit of Leases (1 pp)

cc: Moab Field Office  
Vernal Field Office  
MMS, Reference Data Branch, MS3130, PO Box 5860, Denver CO 80217  
State of Utah, DOGM, Attn: Jim Thompson (Ste. 1210), Box 145801, SLC UT 84114  
Teresa Thompson (UT-922)  
Joe Incardine (UT-921)

### Exhibit of Leases

UTUSL-065841A	UTU-47172	UTU-74415	UTU-53860
UTU-28652	UTU-50687	UTU-74416	UTU-66401
UTU-37943	UTU-52298	UTU-75091	UTU-67868
UTU-44089	UTU-0109054	UTU-75096	UTU-65389
UTU-44090A	UTU-0143511	UTU-75097	UTU-77084
UTU-61263	UTU-0143512	UTU-75673	UTU-61430
UTU-00343	UTU-38401	UTU-76259	UTU-72633
UTU-02651	UTU-38411	UTU-76260	UTU-72650
UTU-02651B	UTU-38418	UTU-76261	UTU-49692
UTU-0142175	UTU-38419	UTU-76493	UTU-57894
UTU-70235	UTU-38420	UTU-76495	UTU-76829
UTU-70406	UTU-38421	UTU-76503	UTU-76830
UTU-74954	UTU-38423	UTU-78228	UTU-76831
UTU-75132	UTU-38424	UTU-78714	
UTU-75699	UTU-38425	UTU-78727	
UTU-76242	UTU-38426	UTU-78734	
UTU-78032	UTU-38427	UTU-79012	
UTU-4377	UTU-38428	UTU-79011	
UTU-4378	UTU-53861	UTU-71694	
UTU-7386	UTU-58097	UTU-00576	
UTU-8344A	UTU-64376	UTU-00647	
UTU-8345	UTU-65222	UTU-01470D	
UTU-8347	UTU-65223	UTU-0136484	
UTU-8621	UTU-66746	UTU-8344	
UTU-14646	UTU-67178	UTU-8346	
UTU-15855	UTU-67549	UTU-8648	
UTU-25880	UTU-72028	UTU-28212	
UTU-28213	UTU-72632	UTU-30289	
UTU-29535	UTU-73009	UTU-31260	
UTU-29797	UTU-73010	UTU-33433	
UTU-31736	UTU-73013	UTU-34711	
UTU-34350	UTU-73175	UTU-46699	
UTU-34705	UTU-73434	UTU-78852	
UTU-37116	UTU-73435	UTU-78853	
UTU-37355	UTU-73444	UTU-78854	
UTU-37573	UTU-73450	UTU-075939	
UTU-38261	UTU-73900	UTU-0149767	
UTU-39223	UTU-74409	UTU-2078	
UTU-40729	UTU-74410	UTU-44426	
UTU-40736	UTU-74413	UTU-49530	
UTU-42469	UTU-74414	UTU-51026	

**OPERATOR CHANGE WORKSHEET**

**ROUTING**

1. GLH	<input checked="" type="checkbox"/>	4-KAS
2. CDW	<input checked="" type="checkbox"/>	5-LP
3. JLT	<input type="checkbox"/>	6-FILE

Enter date after each listed item is completed

Change of Operator (Well Sold)

Designation of Agent

Operator Name Change (Only)

**X** Merger

The operator of the well(s) listed below has changed, effective: **3-09-2001**

<b>FROM:</b> (Old Operator):
COASTAL OIL & GAS CORPORATION
Address: 9 GREENWAY PLAZA STE 2721
HOUSTON, TX 77046-0995
Phone: 1-(713)-418-4635
Account N0230

<b>TO:</b> ( New Operator):
EL PASO PRODUCTION OIL & GAS COMPANY
Address: 9 GREENWAY PLAZA STE 2721 RM 2975B
HOUSTON, TX 77046-0995
Phone: 1-(832)-676-4721
Account N1845

**CA No.**

**Unit: NATURAL BUTTES**

**WELL(S)**

NAME	API NO	ENTITY NO	SEC TWN RNG	LEASE TYPE	WELL TYPE	WELL STATUS
NBU 18	43-047-30221	2900	10-10S-22E	FEDERAL	GW	P
NBU 117	43-047-31914	2900	10-10S-22E	FEDERAL	GW	P
NBU 142	43-047-32013	2900	10-10S-22E	FEDERAL	GW	P
NBU 180	43-047-32113	2900	10-10S-22E	FEDERAL	GW	P
NBU 188	43-047-32234	2900	10-10S-22E	FEDERAL	GW	S
NBU 210	43-047-32340	2900	10-10S-22E	FEDERAL	GW	P
NBU 206	43-047-32341	2900	10-10S-22E	FEDERAL	GW	P
NBU 231	43-047-32561	2900	10-10S-22E	FEDERAL	GW	P
NBU 247	43-047-32977	2900	10-10S-22E	FEDERAL	GW	P
NBU 249	43-047-32978	2900	10-10S-22E	FEDERAL	GW	P
NBU 293	43-047-33182	2900	10-10S-22E	FEDERAL	GW	P
NBU 345	43-047-33704	99999	10-10S-22E	FEDERAL	GW	NEW
NBU 31	43-047-30307	2900	11-10S-22E	STATE	GW	P
NBU 153	43-047-31975	2900	11-10S-22E	FEDERAL	GW	S
NBU 367	43-047-33707	99999	11-10S-22E	STATE	GW	APD
NBU 347	43-047-33709	99999	11-10S-22E	STATE	GW	APD
NBU 350	43-047-33642	2900	14-10S-22E	STATE	GW	DRL
NBU 213	43-047-32401	2900	15-10S-22E	FEDERAL	GW	P
NBU 58-23B	43-047-30463	2900	23-10S-22E	FEDERAL	GW	P
NBU 58	43-047-30838	2900	27-10S-22E	FEDERAL	GW	S

**OPERATOR CHANGES DOCUMENTATION**

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/19/2001
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/19/2001
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 06/21/2001
4. Is the new operator registered in the State of Utah: YES Business Number: 608186-0143

5. If **NO**, the operator was contacted contacted on: N/A
6. **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: 07/10/2001
7. **Federal and Indian Units:** The BLM or BIA has approved the successor of unit operator for wells listed on: 07/10/2001
8. **Federal and Indian Communization Agreements ("CA"):** The BLM or the BIA has approved the operator change for all wells listed involved in a CA on: N/A
9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

---

**DATA ENTRY:**

1. Changes entered in the **Oil and Gas Database** on: 08/21/2001
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 08/21/2001
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

---

**STATE BOND VERIFICATION:**

1. State well(s) covered by Bond No.: N/A

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**FEDERAL BOND VERIFICATION:**

1. Federal well(s) covered by Bond No.: WY 2793

---

**FEE WELLS - BOND VERIFICATION/LEASE INTEREST OWNER NOTIFICATION:**

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond No: N/A
2. The **FORMER** operator has requested a release of liability from their bond on: N/A  
The Division sent response by letter on: N/A
3. (R649-2-10) The **FORMER** 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: \_\_\_\_\_

---

**FILMING:**

1. All attachments to this form have been **MICROFILMED** on: \_\_\_\_\_

---

**FILING:**

1. **ORIGINALS/COPIES** of all attachments pertaining to each individual well have been filled in each well file on: \_\_\_\_\_

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**COMMENTS: Master list of all wells involved in operator change from Coastal Oil & Gas Corporation to El Paso Production Oil and Gas Company shall be retained in the "Operator Change File".**

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OPERATOR El Paso Production  
 ADDRESS P.O. Box 1148  
Vernal, UT 84078

OPERATOR ACCT. NO. N 1845

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	2900	43-047-33709	NBU #347	NWSW	11	10S	22E	Uintah	9/7/2001	9-11-01 <del>9/7/2001</del>

WELL 1 COMMENTS:  
 Spud w/ Ski Air Drilling @ 5:30 am 9-11-01

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		

WELL 2 COMMENTS:

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		

WELL 3 COMMENTS:

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		

WELL 4 COMMENTS:

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		

WELL 5 COMMENTS:

Post-It® Fax Note 7671

Date	9/10	# of pages	▶
To	Jim Thompson	From	Cheryl Cameron
Co./Dept		Co.	
Phone #		Phone #	
Fax #		Fax #	

  
 Signature

Regulatory Analyst 09/10/01  
 Title Date

Phone No. (435) 781-7023

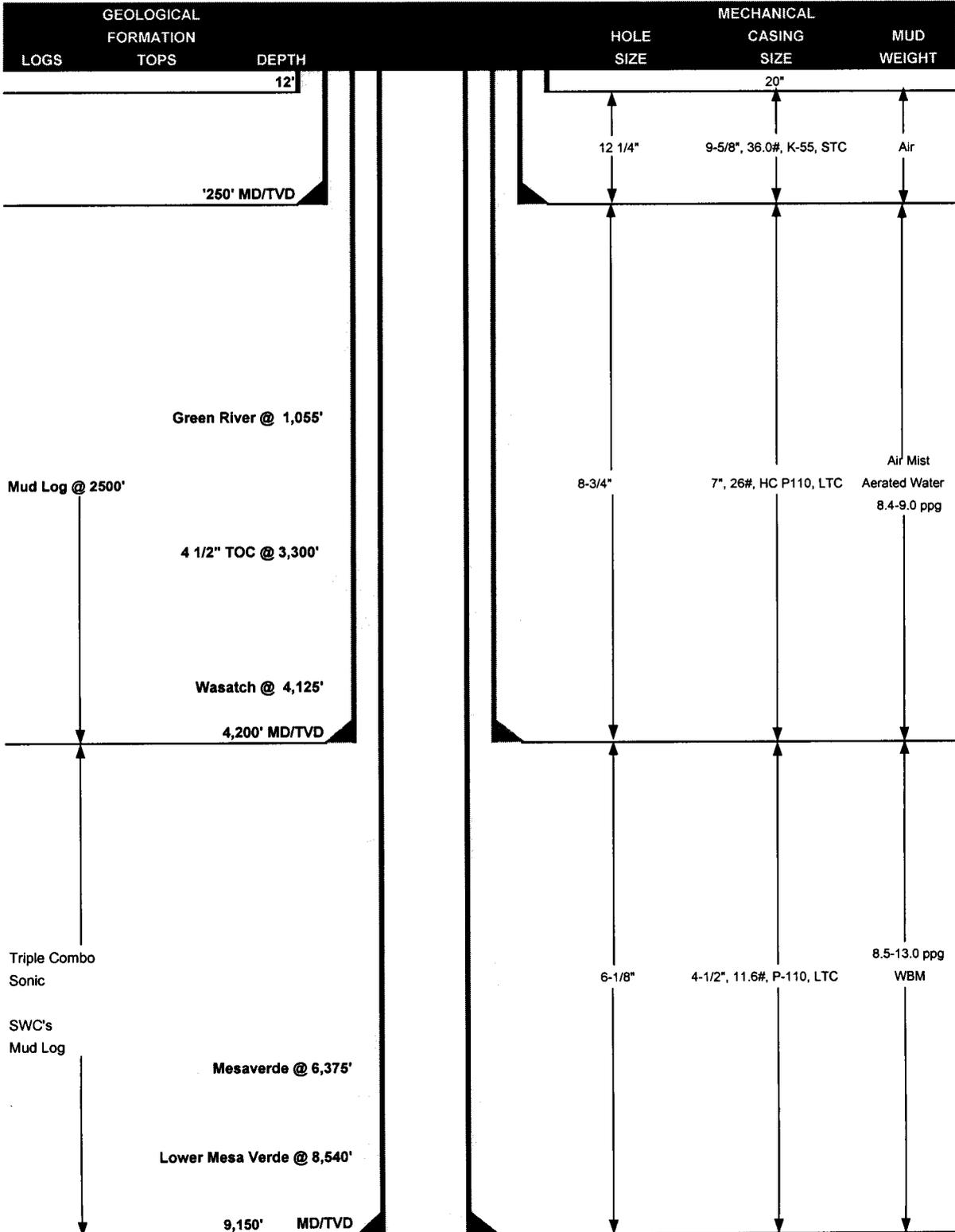
- ACTION CODES (See instructions on back of form)
- A - Establish new entity for new well (single well)
  - B - Add new well to existing entity (group or unit)
  - C - Re-assign well from one existing entity to another
  - D - Re-assign well from one existing entity to another
  - E - Other (explain in comments section)

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



**DRILLING PROGRAM FOR SUNDRY**

COMPANY NAME	El Paso Production	DATE	September 6, 2001
WELL NAME	<b>NBU 347</b>	TD	9,150' MD/TVD
FIELD	Natural Buttes	COUNTY	Uintah STATE Utah ELEVATION 5141' KB
SURFACE LOCATION	1697' FSL, 411' FWL, NW/SW, SEC. 11, T10S, R22E		BHL Straight Hole
OBJECTIVE ZONE(S)	Wasatch, Mesaverde		
ADDITIONAL INFO	Regulatory Agencies: UDOGM, Tri-County Health Dept.		



**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	20"	0-40'				3,520	2,020	423,000
SURFACE	9-5/8"	0-250'	36.00	K-55	STC	25.10	17.26	3.88
INTERMEDIATE	7"	0-4200'	26.00	HC P110	STC	9,950	7,800	693,000
PRODUCTION	4-1/2"	0-TD	11.60	P-110	LTC	6.30	3.97	3.31
						10690	7580	279000
						3.47	1.29	1.39

- 1) Maximum Anticipated Surface Pressure (MASP) (Conductor and Surface Casings) = (Frac Gradient at Shoe - Gas Gradient (0.115 psi/ft))(TVD)
  - 2) MASP (Int Casing) = Pore Pressure at Next Casing Point - (Gas Gradient x TVD of Next Casing Point x 0.67) - (Mud Weight x TVD x 0.052 x 0.33)
  - 3) MASP (Prod Casing) = Pore Pressure - (Gas Gradient x TVD of Production Interval)
- (Burst Assumptions: FG @ 9-5/8" shoe = 13.0 ppg, Max Pore Pressure = 9.0 ppg EMW)  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing, 100,000 lbs overpull)

**CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS <sup>a</sup>	WEIGHT	YIELD
SURFACE		250	Premium Plus + 2% CaCl <sub>2</sub> + 0.25 pps Flocele	230	35%	15.60	1.19
INTERMEDIATE	LEAD	2200	Hillift G + 12% D20 + 3% D44 + 1% D79 + 0.75% D112 + 0.2% D46 + 0.125 #/sk D130	170	60%	11.00	3.91
	TAIL	2000	50/50 Poz/G + 2% D20 + 2% D174 + 0.25% D65 + 0.2% D46	390	60%	14.20	1.29
PRODUCTION	TAIL	5850	50/50 Poz/G + 2% D20 + 2% D174 + 0.4% D167 + 0.1% D13 + 0.25% D65 + 0.2% D46	690	60%	14.20	1.29

\* or 15% over caliper log

**FLOAT EQUIPMENT & CENTRALIZERS**

300' - SURFACE	Guide shoe, 1 joint, float collar. Centralize every other joint to surface. Thread lock GS & FC
INTERMEDIATE	Float shoe, 1 joint, float collar. Thread lock FS & FC
PRODUCTION	Float shoe, 1 joint, float collar. Thread lock float equipment. Centralize first 3 joints and every third joint to cement top.

**ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,000 psi prior to drilling out. Test int. csg. to 1,500 psi prior to drilling out.  
 BOPE to intermediate: 13-5/8" 3M with one 3M annular and 2 rams. Test to 3,000 psi (annular to 1,500 psi) prior to drilling out. BOPE to TD:  
 11" 5M with one 5M annular and 2 rams. Test to 5,000 psi (annular to 3,000 psi) prior to drilling out. Record on chart recorder &  
 tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper  
 & lower kelly valves.  
 Run Totco survey every 1000' from surface casing shoe to TD. Maximum allowable hole angle is 5 degrees.

**DRILLING ENGINEER:**

\_\_\_\_\_  
 Dan Lindsey

DATE: \_\_\_\_\_

**DRILLING SUPERINTENDANT:**

\_\_\_\_\_  
 Larry Strasheim

DATE: \_\_\_\_\_

# 11-00 Coastal NBU #347 rev.

## Casing Schematic

Surface

9-5/8"  
MW 8.4  
Frac 19.3

TOC @ 0.  
TOC @ 0.  
Surface  
250. MD

w/1398 washout

1055' -  
Gravel

w/148 washout

BOP  
 $(0.052)(13)(9150) = 6185 \text{ psi}$

$(0.12)(9150) = 1098 \text{ psi}$

MASP = 5087

$(0.22)(9150) = 2013 \text{ psi}$

MASP = 4172 psi

5M BOPE proposed  
 Adequate Prod 9/17/01

4125'  
Washout  
7"  
MW 9.  
Frac 19.3

TOC @  
3592.

Intermediate  
4200. MD

6375'  
MenVerde

w/158 washout

8540'  
Lower AV

4-1/2"  
MW 13.

Production  
9150. MD

Well name:	<b>11-00 Coastal NBU #347rev.</b>		
Operator:	<b>Coastal</b>		Project ID:
String type:	<b>Surface</b>		<b>43-047-33709</b>
Location:	<b>Uintah County</b>		

**Design parameters:**

**Collapse**

Mud weight: 8.400 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 78 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 250 ft

Cement top: **Surface**

**Burst**

Max anticipated surface pressure: 0 psi  
 Internal gradient: 0.468 psi/ft  
 Calculated BHP 117 psi

No backup mud specified.

**Tension:**

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

Tension is based on buoyed weight.  
 Neutral point: 219 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 4,200 ft  
 Next mud weight: 9.000 ppg  
 Next setting BHP: 1,964 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 250 ft  
 Injection pressure 250 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ( )
1	250	9.625	36.00	K-55	ST&C	250	250	8.765	2932

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	109	2020	18.52	117	3520	30.12	8	423	53.67 J

Prepared RJK/DKD  
 by: Utah Dept. of Natural Resources

Date: September 17,2001  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 250 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.  
 In addition, burst strength is biaxially adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>11-00 Coastal NBU #347rev.</b>	
Operator:	<b>Coastal</b>	Project ID:
String type:	Intermediate	43-047-33709
Location:	Uintah County	

**Design parameters:**

**Collapse**

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

**Burst**

Max anticipated surface pressure: 0 psi  
Internal gradient: 0.675 psi/ft  
Calculated BHP: 2,836 psi  
  
No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Tension:**

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

Tension is based on buoyed weight.  
Neutral point: 3,630 ft

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 134 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,500 ft

Cement top:

Surface

Non-directional string.

**Re subsequent strings:**

Next setting depth: 9,151 ft  
Next mud weight: 13.000 ppg  
Next setting BHP: 6,180 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 4,200 ft  
Injection pressure: 4,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ( )
1	4200	7	26.00	HCP-110	LT&C	4200	4200	6.151	55566
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	1964	7800	3.97	2836	9955	3.51	94	693	7.34 J

Prepared RJK/DKD  
by: Utah Dept. of Natural Resources

Date: September 17, 2001  
Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
Collapse is based on a vertical depth of 4200 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes.  
In addition, burst strength is biaxially adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>11-00 Coastal NBU #347rev.</b>		
Operator:	<b>Coastal</b>	Project ID:	43-047-33709
String type:	Production		
Location:	Uintah County		

**Design parameters:**

**Collapse**

Mud weight: 13.000 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 203 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 250 ft

Cement top:

3,592 ft  
*w/IS & westcott*

**Burst**

Max anticipated surface pressure: 0 psi  
 Internal gradient: 0.675 psi/ft  
 Calculated BHP: 6,179 psi  
 No backup mud specified.

**Tension:**

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

Non-directional string.

Tension is based on buoyed weight.  
 Neutral point: 7,372 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ( )
1	9150	4.5	11.60	P-110	LT&C	9150	9150	3.875	56108
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	6179	7580	1.23	6179	10694	1.73	86	279	3.26 J

Prepared RJK/DKD  
 by: Utah Dept. of Natural Resources

Date: September 17,2001  
 Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
 Collapse is based on a vertical depth of 9150 ft, a mud weight of 13 ppg The casing is considered to be evacuated for collapse purposes.  
 In addition, burst strength is biaxially adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

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

6. Lease Designation and Serial Number  
 U-01197-A-ST

7. Indian Allottee or Tribe Name

8. Unit or Communitization Agreement  
 NATURAL BUTTES UNIT

9. Well Name and Number  
 NBU #347

10. API Well Number  
 43-047-33709

11. Field and Pool, or Wildcat  
 Natural Buttes

**SUNDRY NOTICES AND REPORTS ON WELLS**  
 Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
 Use APPLICATION FOR PERMIT -- for such proposals

1. Type of Well  
 Oil Well     Gas Well     Other (specify)

2. Name of Operator  
 El Paso Production

3. Address of Operator  
 P.O. Box 1148 Vernal, UT 84078

4. Telephone Number  
 (435) 781-7023

5. Location of Well  
 Footage : 1697' FSL & 411' FWL                      County : Uintah  
 QQ, Sec, T., R., M : NWSW Sec. 11, T10S, F22E                      State : UT

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

**NOTICE OF INTENT**  
 (Submit in Duplicate)

<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction
<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing
<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Shoot or Acidize
<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Vent or Flare
<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Other _____	

Approximate Date Work Will Start \_\_\_\_\_

**SUBSEQUENT REPORT**  
 (Submit Original Form Only)

<input type="checkbox"/> Abandonment *	<input type="checkbox"/> New Construction
<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing
<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Shoot or Acidize
<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Vent or Flare
<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Other <u>Well Spud</u>	

Date of Work Completion 9/7/01

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.  
 \* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

MIRU Ski Air Drilling. Spud @ 5:00 am 9/7/01. Drilled 12 1/4" hole to 251'. Run 266' of 9 5/8" 36# K-55 csg. Cmt w/ 130 sx Type V, 15.6 ppg, 1.18 yield. Cmt to surface.

W/O Rotary Tools

**RECEIVED**

SEP 17 2001

DIVISION OF  
 OIL, GAS AND MINING

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

Name & Signature Cheryl Cameron  Title Regulatory Analyst Date 09/10/01

(State Use Only)

JAN. 17. 2003 3:34PM

WESTPORT

NO. 173 P. 2

**WESTPORT OIL AND GAS COMPANY, L.P.**

410 Seventeenth Street #2300 Denver Colorado 80202-4436  
Telephone: 303 573 5404 Fax: 303 573 5609

**February 1, 2002**

Department of the Interior  
Bureau of Land Management  
2850 Youngfield Street  
Lakewood, CO 80215-7093  
Attention: Ms. Martha Maxwell

**RE: BLM Bond CO-1203  
BLM Nationwide Bond 158626364  
Surety - Continental Casualty Company  
Belco Energy Corporation merger into Westport Oil and Gas Company, Inc.  
Conversion of Westport Oil and Gas Company, Inc., into Westport Oil and Gas Company, L.P.  
Assumption Rider - Westport Oil and Gas Company, L.P.**

**Dear Ms. Maxwell:**

**Pursuant to our recent conversations, please find the following list of enclosures for the BLM's consideration and approval:**

**Two (2) Assumption Riders, fully executed originals.  
Copies of Belco Energy Corporation merger into Westport Oil and Gas Company, Inc.  
Copies of Westport Oil and Gas Company, Inc., conversion into Westport Oil and Gas Company, L.P.  
List of all Federal/BIA/State Leases - Belco/Westport's leases - in all states.**

**Please inform us of any additional information needed to complete the change to Westport Oil and Gas Company, L.P., as operator of record.**

**I thank you for your assistance and cooperation in this matter. Please do not hesitate contacting the undersigned, should a question arise.**

**Sincerely,  
Westport Oil and Gas Company, L.P.**

*Debby J. Black*

**Debby J. Black  
Engineer Technician**

**Encl:**



United States Department of the Interior **RECEIVED**

BUREAU OF LAND MANAGEMENT

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

FEB 22 2002

DIVISION OF  
OIL, GAS AND MINING

In Reply Refer To:  
3106  
UTU-25566 et al  
(UT-924)

FEB 21 2002

NOTICE

Westport Oil and Gas Company L.P. : Oil and Gas  
410 Seventeenth Street, #2300 :  
Denver Colorado 80215-7093 :

Name Change Recognized

Acceptable evidence has been received in this office concerning the name change of Westport Oil and Gas Company, Inc. into Westport Oil and Gas Company, L.P. with Westport Oil and Gas Company, L.P. being the surviving entity.

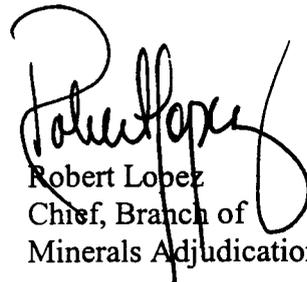
For our purposes, the name change is recognized effective December 31, 2001.

The oil and gas lease files identified have been noted as to the name change. The exhibit was compiled from a list of leases obtained from our computer program. We have not abstracted the lease files to determine if the entities affected by this name change hold an interest in the leases identified nor have we attempted to identify leases where the entities are the operator on the ground maintaining no vested recorded title or operating rights interests. We will be notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice. If additional documentation for changes of operator are required by our Field Offices, you will be contacted by them.

If you identify additional leases in which the entities maintain an interest, please contact this office and we will appropriately document those files with a copy of this Notice.

Due to the name change, the name of the principal/obligor on the bond is required to be changed from Westport Oil and Gas Company, Inc. to Westport Oil and Gas Company, L.P.. You may accomplish this either by consent of surety rider on the original bond or a rider to the original bond. The bonds are held in Colorado.

UTU-03405  
UTU-20895  
UTU-25566  
UTU-43156  
UTU-49518  
UTU-49519  
UTU-49522  
UTU-49523



Robert Lopez  
Chief, Branch of  
Minerals Adjudication

cc: Moab Field Office  
Vernal Field Office  
MMS, Reference Data Branch, MS3130, PO Box 5860, Denver CO 80217  
State of Utah, DOGM, Attn: Jim Thompson (Ste. 1210), Box 145801, SLC UT 84114  
Teresa Thompson (UT-922)  
Joe Incardine (UT-921)

Form 9

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

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		6. Lease Designation and Serial Number U-01197-A-ST
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT -- for such proposals		7. Indian Allottee or Tribe Name
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify) _____		8. Unit or Communitization Agreement Natural Buttes
2. Name of Operator El Paso Production Oil & Gas Company		9. Well Name and Number NBU #347
3. Address of Operator P.O. Box 1148 Vernal, UT 84078		10. API Well Number 43-047-33709
4. Telephone Number (435) 781-7023		11. Field and Pool, or Wildcat Natural Buttes
5. Location of Well Footage : Sec. 11, T10S, R22E     County : Uintah QQ, Sec. T., R., M : NWSW 1697' FSL & 411' FWL     State : UT		

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

**NOTICE OF INTENT**  
(Submit in Duplicate)

<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction
<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing
<input checked="" type="checkbox"/> Change of Plans	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Shoot or Acidize
<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Vent or Flare
<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Other _____	

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

<input type="checkbox"/> Abandonment *	<input type="checkbox"/> New Construction
<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing
<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Shoot or Acidize
<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Vent or Flare
<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Other _____	

Approximate Date Work Will Start April 2002

Date of Work Completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.  
 \* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Operator requests authorization to amend the approved TD of 9150' to a TD of 7300'. Refer to the amended well bore schematic for the TD, Casing & Cementing Program.

COPY SENT TO OPERATOR  
 Date: 03-29-02  
 Initials: CHO

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

Name & Signature Cheryl Cameron Title Operations Date 03/28/02  
 (State Use Only)

**APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING**  
 See Instructions on Reverse Side

DATE 3/29/02  
 BY: [Signature]  
 \* Oil Shale Area - Cause No. 190-5(B) (R649-3-31)

**RECEIVED**  
 MAR 29 2002  
 DIVISION OF OIL, GAS AND MINING

EL PASO PRODUCTION COMPANY  
1368 S. 1200 E., PO BOX 1148  
VERNAL, UT 84078  
PHONE: 435-789-4433 FAX: 435-789-4436, 435-781-7095



# Fax Transmittal

TO: <i>Dustin Duce</i>	FAX:
COMPANY:	DATE:
FROM: <i>Cheryl Ammer</i>	PHONE:
RE:	PAGES:

Urgent   
 For Review   
 Please Comment   
 Please Reply   
 Please Recycle

Comments:

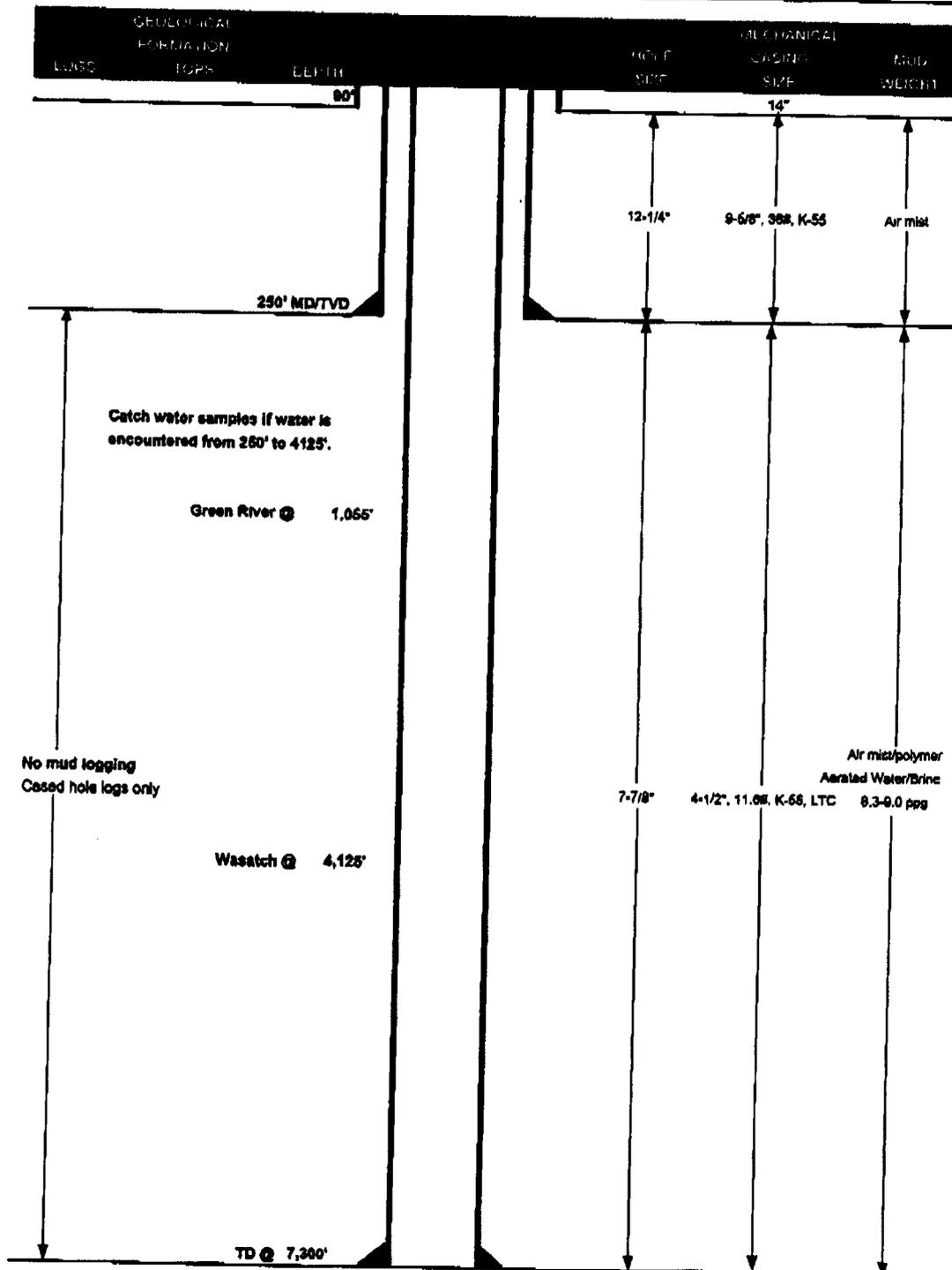
*One more . . .*

**RECEIVED**  
MAR 29 2002  
DIVISION OF  
OIL, GAS AND MINING



# DRILLING PROGRAM FOR SUNDRY

COMPANY NAME El Paso Production Company DATE March 26, 2002  
 WELL NAME NBU 347 TD 7,300' MD/TVD  
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 5,140' KB  
 SURFACE LOCATION 1697 FSL, 411' FWL, NW/8W, SEC. 11, T10S, R22E  
 OBJECTIVE ZONE(S) Wasatch BHL Straight Hole  
 ADDITIONAL INFO Regulatory Agencies: UDOGM, BLM, Tri-County Health Dept.



**eipaso** Production  
**DRILLING PROGRAM**

**CASING PROGRAM**

	SIZE	INTERVAL	WT	GR	TYPE	DESIGN FACTORS		
						BORE	COLL APPT	TENSION
CONDUCTOR	14"	0-40'						
SURFACE	9-5/8"	0-250'	96.00	K-55	STC	3520	2020	423000
						25.10	17.26	7.55
PRODUCTION	4-1/2"	0-TD	11.60	K-55	LTC	5350	4960	180000
						2.08	1.45	1.34

- 1) Maximum Anticipated Surface Pressure (MASP) (Conductor and Surface Casings) = (Frac Gradient at Shoe - Gas Gradient (0.115 psi/ft))(TVD)
  - 2) MASP (Int Casing) = Pore Pressure at Next Casing Point - (Gas Gradient x TVD of Next Casing Point x 0.67) - (Mud Weight x TVD x 0.33)
  - 3) MASP (Prod Casing) = Pore Pressure - (Gas Gradient x TVD of Production Interval)
- (Burst Assumptions: FG @ 8-5/8" shoe = 13.0 ppg, Max Pore Pressure = 9.0 ppg (EMW))  
(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing, 50000 lbs overpull)

**CEMENT PROGRAM**

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	250	Premium Plus + 2% CaCl <sub>2</sub> + 0.125 pps polyflake	110	35%	18.60	1.18
PRODUCTION	LEAD 3,620'	Hilift + 12% gel + 3% salt + 1% D79 + 0.5% D112 + 0.2% D46	330	60%	11.00	3.81
	TAIL 3,680'	50/50 Poz/G + 10% salt + 2% gel + 0.2% D46	1020	60%	14.10	1.33

**FLOAT EQUIPMENT & CENTRALIZERS**

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

**ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.  
 BOPE: 11" 3M with one annular and 2 rams. Test to 3,000 psi (annular to 1,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.  
 Run Torque surveys every 2000'. Maximum allowable hole angle is 5 degrees.

DRILLING ENGINEER: \_\_\_\_\_  
Dan Lindsey

DATE: \_\_\_\_\_

DRILLING SUPERINTENDANT: \_\_\_\_\_  
Larry Straszheim

DATE: \_\_\_\_\_

03-02 El Paso NBU #347r

Casing Schematic

Surface

9-5/8"  
MW 8.4  
Frac 19.3

TOC @ 0.  
TOC @ 0.  
Surface  
250. MD

w/11% washout

1055'  
Green River

Oil shale - cement will cover  
BMSGW → must  
be brought above  
oil shale!

NBU - watch MU PA

- 3537' TOC tail w/18% washout

BoD

BHP  
 $(0.052)(9)(7300) = 3416 \text{ psi}$

4125'  
Wasatch

- 4140' - approx Base of Mod. Saline GW

Gas  
 $(0.12)(7300) = 876$

MASP = 2540 psi

w/18% washout

3MBPE proposes

Adequate  
DKD 3/24/02

4-1/2"  
MW 9.

Production  
7300. MD

Well name:

**03-02 EIPaso NBU #347rev.**

Operator: **Coastal**

String type: **Surface**

Project ID:  
43-047-33709

Location: **Uintah County**

**Design parameters:**

**Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 0 psi  
Internal gradient: 0.468 psi/ft  
Calculated BHP 117 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Tension:**

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

Tension is based on buoyed weight.

Neutral point: 219 ft

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 78 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 250 ft

Cement top:

**Surface**

Non-directional string.

**Re subsequent strings:**

Next setting depth: 7,300 ft  
Next mud weight: 9.000 ppg  
Next setting BHP: 3,413 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 7,300 ft  
Injection pressure 7,300 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ( )
1	250	9.625	36.00	K-55	ST&C	250	250	8.765	2932
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	109	2020	<u>18.52</u>	117	3520	30.12	8	423	<u>53.67 J</u>

Prepared by: **DKD**  
Utah Dept. of Natural Resources

Date: **March 29, 2002**  
Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
Collapse is based on a vertical depth of 250 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes.  
In addition, burst strength is biaxially adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:

**03-02 EIPaso NBU #347rev.**

Operator: **Coastal**  
String type: **Production**

Project ID:  
43-047-33709

Location: **Uintah County**

**Design parameters:**

**Collapse**

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

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Environment:**

H2S considered? No  
Surface temperature: 65 °F  
Bottom hole temperature: 167 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 250 ft

**Burst:**

Design factor 1.00

Cement top:

Surface

**Burst**

Max anticipated surface pressure: 0 psi  
Internal gradient: 0.468 psi/ft  
Calculated BHP: 3,413 psi

**Tension:**

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

Non-directional string.

No backup mud specified.

Tension is based on buoyed weight.

Neutral point: 6,318 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ( )
1	7300	4.5	11.60	K-55	LT&C	7300	7300	3.875	31825

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	3413	4960	1.45	3413	5350	1.57	73	180	2.46 J

Prepared by: DKD  
Utah Dept. of Natural Resources

Date: March 29, 2002  
Salt Lake City, Utah

**ENGINEERING STIPULATIONS: NONE**

Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.  
Collapse is based on a vertical depth of 7300 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes.  
In addition, burst strength is biaxially adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

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

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b></p> <p>Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.                  Use APPLICATION FOR PERMIT -- for such proposals</p>		6. Lease Designation and Serial Number U-01197-A-ST
		7. Indian Allottee or Tribe Name
		8. Unit or Communitization Agreement Natural Buttes Unit
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)		9. Well Name and Number NBU #347
2. Name of Operator El Paso Production Oil & Gas Company		10. API Well Number 43-047-33709
3. Address of Operator P.O. Box 1148 Vernal, Utah 84078	4. Telephone Number (435) 781-7024	11. Field and Pool, or Wildcat Natural Buttes
5. Location of Well Footage : 1697'FSL & 411'FWL      County : Uintah QQ, Sec, T., R., M. : NWSW Section 11-T10S-R22E      State : Utah		

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA																											
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Finished Drilling f/265' to 6811' Ran 4 1/2" 11.6# K-55 LTC Csg.  
 Cmt w/330 sx Hi Lift Class G @11.0 ppg Yield 3.91.  
 Tailed w/883 sx 50/50 POZ @14.3 ppg Yield 1.31

Released Rig on 4/12/02 at 9 am.

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

Name & Signature Sheila Upchego Title Regulatory Analyst Date 4/15/02

(State Use Only)

**RECEIVED**

APR 23 2002  
 DIVISION OF  
 OIL, GAS AND MINING

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

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b></p> <p>Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.                  Use APPLICATION FOR PERMIT -- for such proposals</p>		6. Lease Designation and Serial Number U-01197-A-ST
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13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

The subject well was placed on production on 5/15/02.  
 Please refer to the attached chronological well history.

**RECEIVED**  
**MAY 28 2002**  
**DIVISION OF**  
**OIL, GAS AND MINING**

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

Name & Signature Sheila Upchego  Title Regulatory Analyst Date 05/23/02

(State Use Only)

EL PASO  
PRODUCTION REPORT

CHRONOLOGICAL HISTORY

Page 1

NBU 347

LOC.

NATURAL BUTTES FIELD  
UINTAH COUNTY, UT

WI: 100%

PBTD PERFS:

CSG:

SPUD DATE:

AFE DESCR., AFE: 057679

FORMATION:

**DRILLING REPORT:**

NBU, Uintah, UT Rig: El Paso 2 WI: 100% AFE: 057679 ATD: 6,800'  
SD: 4/02 Wasatch @ 4,905' 8 5/8" @ 277'

4/4/02 TD: 281 MW: 50% MIRU.

4/5/02 TD: 721 MW: Air/Mist 440'/4.5 hrs MIRU. NU & test BOP's. Drill cement & float equipment. Drilling to present depth.

4/8/02 TD: 4,757 MW: Air/Water 900'/23.5 hrs Drilling to present depth.

4/9/02 TD: 5,344 MW: Air/Water 587'/18.5 hrs Drill to present depth. TFNB.

4/10/02 TD: 5,917 MW: Air/Water 573'/20 hrs Drilling to present depth.

4/11/02 TD: 6,587 MW: Air/Water 670'/23.5 hrs Drilling to present depth.

4/12/02 TD: 6,811 MW: 9.5 224'/7 hrs Drill to TD. Displace hole w/mud. LDDP. Run & cement 4 1/2" prod casing. ND BOP's. Set casing hanger. Install well cap. Rig released @ 0600, 4/12/02

AFE DESC. WASATCH COMPLETION, AFE#: 057679

WI: 100%

PBTD: 6,783'

CSG: 4 1/2", 11.6#, K-55 LT&C @ 6811'

PERFS: 4,726'-6,654'

**RECEIVED**

MAY 28 2002

**DIVISION OF  
OIL, GAS AND MINING**

5/2/02 **PREP TO CO WELLBORE**  
MIRU. SIH W/3 7/8" MILL & 2 3/8" TBG. EOT @ 4500'.

5/3/02 **PREP TO FRAC**  
TAG PBTD @ 6783'. REV CIRC WELL CLEAN W/100 BBLs 2% KCL. TST CSG TO 5000#. PMP 40 BBLs 2% KCL DN 4 1/2" X 8 5/8" ANNULUS. UNABLE TO CATCH PRESSURE. PERF MESA VERDE FROM 6648'-6654', 4 SPF, 24 HOLES & 6604'-6610', 4 SPF, 24 HOLES. BRK DN PERFS W/2700# @ 1/2 BPM. ISIP: 1700#, FG: 0.70.

5/6/02 **RIG ON STAND BY. WILL FRAC 5/6/02.**

5/7/02

**PREP TO DO CBP'S**

**STAGE 1: BRK DN MESA VERDE PERFS 6604'-54' W/2700# @ ½ BPM. ISIP: 1700#, FG: 0.70. FRAC W/878 BBLs YF115ST LIQ GEL & 91,000# 20/40 SD. ISIP: 2568#, FG: 0.82, NET PRESS INCR: 868#, MTP: 4193#, ATP: 3210#, MTR: 37.9 BPM, ATR: 33.1 BPM. PU & RIH W/CBP & PERF GUN. SET CBP @ 6550'.**

**STAGE 2: PERF MESA VERDE 6430'-6436', 4 SPF, 24 HOLES & 6408'-6414', 4 SPF, 24 HOLES. BRK DN PERFS W/2184# @ 1 ½ BPM. ISIP: 1511#, FG: 0.67. FRAC W/1382 BBLs YF115ST LIQ GEL & 150,500# 20/40 SD. ISIP: 2225#, FG: 0.78, NET PRESS INCR: 714#, MTP: 3242#, ATP: 2852#, MTR: 36.4 BPM, ATR: 34.2 BPM. PU & RIH W/CBP & PERF GUN. SET CBP @ 6340'.**

**STAGE 3: PERF WASATCH 5930'-5936', 4 SPF, 24 HOLES & 5870'-5876', 4 SPF, 24 HOLES. BRK DN PERFS W/2692# @ 1 ½ BPM. ISIP: 2083#, FG: 0.69. PUMP 692 BBLs YF113ST LIQ GEL & 66,760# 20/40 SD. ISIP: 2083#, FG: 0.69. PMP 692 BBLs YF113ST LIQ GEL & 66,700# 20/40 SD. ISIP: 2083#, FG: 0.79, NET PRESS INCR: 549#, MTP: 3918#, ATP: 2816#, MTR: 37 BPM, ATR: 32.8 BPM. RIH & SET CBP @ 5800'. PU & RIH W/3 7/8" BIT. TAG PLUG @ 5800'.**

5/8/02

**FLWG BACK LOAD**

**DO CBP'S @ 5800', 6340', & 6550'. CO TO 6780' W/AIR FOAM. PU & LAND TBG @ 6546', SN @ 6514'. OPEN TO PIT ON FULL OPEN CHK FOR 14 HRS. CP: 450# TO 1000# TO 960#, FTP: 50# TO 100#, 60 BWPH TO 10 BWPH, TRACE SD TO NONE, GAS EST: 1000 MCFPD. TLTR: 3172 BBLs, TLR: 1382 BBLs, LLTR: 1790 BBLs.**

5/9/02

**SI WO FACILITIES**

**FLOW BACK 24 HRS ON FULL OPEN CHK. CP: 925# TO 700#. FTP: AVG 120#, 10 BWPH TO 2 BWPH. TLTR: 3172 BBLs, TLR: 1585 BBLs, LLTR: 1587 BBLs, GAS RATE EST 1200 MCFPD.**

5/10/02

**SI WO FACILITIES.**

5/13/02

**SI WO FACILITIES.**

5/14/02

**SI WO FACILITIES.**

5/15/02

**SI WO FACILITIES. PLAN TO PLACE ON SALES THIS AM.**

5/16/02

**TURNED TO SALES 5/15/02 @ 11:00 AM. SPOT READING: CHK: 20/64", FTP: 560#, CP: 1286#.**

5/17/02

**FLWD 299 MCF, 357 BW, FTP: 180#, CP: 879#, 64/64" CHK, 19 HRS, LP: 71#, TLTR: 3172 BBLs, TLR: 1942 BBLs, LLTR: 1230 BBLs.**

5/20/02

**ON SALES**

**5/19/02: 445 MCF, 0 BC, 321 BW, TP: 80#, CP: 542#, 64/64" CHK, 24 HRS, LP: 68#.  
5/20/02: 446 MCF, 0 BC, 215 BW, TP: 85#, CP: 508#, 64/64" CHK, 24 HRS, LP: 76#.**

5/21/02

**ON SALES**

**435 MCF, 0 BC, 206 BW, TP: 88#, CP: 489#, 64/64" CHK, 24 HRS, LP: 81#. TLTR: 3172 BBLs, TLR: 2329 BBLs, LLTR: 843 BBLs.**

5/22/02

**FLOWING TO SALES**

**426 MCF, 0 BC, 72 BW, TP: 81#, CP: 459#, CK: 64/64", 24 HRS, LP: 72#,  
TLTR: 3172 BBLs, TLR: 2401 BBLs, LLTR: 771 BBLs. THE WELL IP ON 5-20-02 FOR 446 MCF, 0 BC, 215 BW, TP: 85#, CP: 508#, CK: 64/64", 24 HRS, LP: 76#. FINAL REPORT.**

**RECEIVED**

**MAY 20 2002**

**DIVISION OF  
OIL, GAS AND MINING**

**STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING**

<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG*</b>		5. LEASE DESIGNATION AND SERIAL NO. <b>U-01197-A-ST</b>	
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
1a. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____		7. UNIT AGREEMENT NAME <b>NATURAL BUTTES UNIT</b>	
1b. TYPE OF COMPLETION NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____		8. FARM OR LEASE NAME, WELL NO. <b>NBU</b>	
2. NAME OF OPERATOR <b>El Paso Production Oil &amp; Gas Company</b>		9. WELL NO. <b>347</b>	
3. ADDRESS AND TELEPHONE NO. <b>P.O. Box 1148 Vernal, UT 84078 (435) 781-7023</b>		10. FIELD AND POOL OR WILDCAT <b>Natural Buttes</b>	
4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements) At Surface <b>NWSW 1697' FSL &amp; 411' FWL</b> At top prod. Interval reported below		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA <b>Sec. 11, T10S, R22E</b>	
At total depth		14. API NO. <b>43-047-33709</b>	12. COUNTY <b>Uintah</b>
		DATE ISSUED <b>11/13/00</b>	13. STATE <b>UT</b>
15. DATE SPUDDED <b>9/7/01</b>	16. DATE T.D. REACHED <b>4/11/02</b>	17. DATE COMPL. (Ready to prod. or Plug & Back) <b>5/8/02</b>	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* <b>5128 Ungraded GL</b>
19. ELEV. CASINGHEAD		20. TOTAL DEPTH, MD & TVD	
<b>6811 MD</b>		<b>6780 MD</b>	
21. PLUG, BACK T.D., MD & TVD		22. IF MULTIPLE COMPL., HOW MANY	
<b>TD 6780 MD</b>		<b>TD 6780 MD</b>	
23. INTERVALS DRILLED BY		24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)	
<b>-----&gt;  X</b>		<b>Mesaverde 5870-6654</b>	
25. WAS DIRECTIONAL SURVEY MADE		26. TYPE ELECTRIC AND OTHER LOGS RUN	
<b>No</b>		<b>CNL-CBL/CNL/GR-4-35-02</b>	
27. WAS WELL CORED YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> (Submit analysis)		28. DRILL STEM TEST YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> (See reverse side)	

23. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8	36# <i>K-55</i>	265	12 1/4	130 sx Type V	
4 1/2	11.6# <i>K-55</i>	6811	7 7/8	330 sx Hilift Lead	
				883 sx 50/50 Poz Tail	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	6546	

31. PERFORATION RECORD (Interval, size and number)			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL	SIZE	NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5870-5936	4	48	5870-5936	66,760# 20/40 sand
6408-6436	4	48	6408-6436	150,500# 20/40 sand
6604-6654	4	48	6604-6654	91,000# 20/40 sand

33.* PRODUCTION							
DATE FIRST PRODUCTION <b>5/15/02</b>		PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) <b>Flowing</b>				WELL STATUS (Producing or shut-in) <b>Producing</b>	
DATE OF TEST <b>5/20/02</b>	HOURS TESTED <b>24</b>	CHOKE SIZE <b>64/64</b>	PROD'N. FOR TEST PERIOD <b>-----&gt;</b>	OIL--BBL. <b>0</b>	GAS--MCF. <b>446</b>	WATER--BBL. <b>446</b>	GAS-OIL RATIO <b>215</b>
FLOW TUBING PRESS. <b>85#</b>	CASING PRESSURE <b>508#</b>	CALCULATED 24-HOUR RATE <b>-----&gt;</b>	OIL--BBL. <b>0</b>	GAS--MCF. <b>446</b>	WATER--BBL. <b>446</b>	OIL GRAVITY-API (CORR.) <b>215</b>	TEST WITNESSED BY
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) <b>Sold &amp; Used For Fuel</b>							

35. LIST OF ATTACHMENTS

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

SIGNED Cheryl Cameron TITLE Operations JUN 6 2002 DATE 2002/10/2002

**RECEIVED**

See Spaces for Addition Data on Reverse Side

**INSTRUCTIONS**

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachments.  
 ITEMS 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

ITEM 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

ITEM 33: Submit a separate completion report on this form for each interval to be separately produced (see instruction for items 22 and 24 above).

37. SUMMARY OF POROUS ZONES: Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.		38. GEOLOGIC MARKERS									
Formation	Top	Bottom	Description, contents, etc.								
Green River	1055	4099									
Wasatch	4099	6383									
Mesaverde	6383										
			<table border="1"> <thead> <tr> <th>Name</th> <th>Meas. Depth</th> <th>Top</th> <th>True Vert. Depth</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;"> <b>RECEIVED</b>                      JUN 17 2002                      DIVISION OF                      OIL, GAS AND MINING                 </td> </tr> </tbody> </table>	Name	Meas. Depth	Top	True Vert. Depth	<b>RECEIVED</b> JUN 17 2002 DIVISION OF OIL, GAS AND MINING			
Name	Meas. Depth	Top	True Vert. Depth								
<b>RECEIVED</b> JUN 17 2002 DIVISION OF OIL, GAS AND MINING											

# memorandum

Branch of Real Estate Services  
Uintah & Ouray Agency

Date: 5 December, 2002

Reply to  
Attn of: Supervisory Petroleum Engineer

Subject: Modification of Utah Division of Oil, Gas and Mining Regulations

To: Director, Utah Division of Oil, Gas and Mining Division: John Baza

We have been advised of changes occurring with the operation of your database for Change of Operator. You will be modifying your records to reflect Change of Operator once you have received all necessary documentation from the companies involved, and perhaps in advance of our Notice of Concurrence/Approval of Change of Operator where Indian leases are involved.

We have no objection.

With further comment to Rulemaking, I wish to comment concerning the provision of Exhibits for upcoming Hearings. I would like to see the Uintah & Ouray Agency, BIA, and the Ute Indian Tribe, Energy & Mineral Resources Department added to the list of those parties that receive advance Exhibits so as to allow us to have research time prior to Hearing dates. We will be able to provide a more informed recommendation to the Oil, Gas and Mining Board. It would be best if we would receive only those Exhibits that concern Indian lands, specifically on or adjacent to Indian lands. This may be a difficult situation to attain, as it is not always clear where 'on or adjacent' occurs.

I am aware that you have gone to extra effort to correct this matter already, and I fully appreciate it. My request is intended only to allow the addition of Uintah & Ouray Agency and Ute Indian Tribe to the official listing.

We appreciate your concern, and hope that these comments are timely enough for consideration in the revision process.



CC: Minerals & Mining Section of RES  
Ute Energy & Mineral Resources Department: Executive Director  
chrono



IN REPLY REFER TO:  
Real Estate Services

## United States Department of the Interior

BUREAU OF INDIAN AFFAIRS  
Washington, D.C. 20240

FEB 10 2003

Carroll A. Wilson  
Principal Landman  
Westport Oil and Gas Company, L.P.  
1368 South 1200 East  
Vernal, Utah 84078

Dear Mr. Wilson:

This is in response to your request for approval of RLI Insurance Company's Nationwide Oil and Gas Lease Bond No. RLB0005239 executed effective December 17, 2002, (\$150,000 coverage) with Westport Oil and Gas Company, L. P., as principal.

This bond is hereby approved as of the date of this correspondence and will be retained in the Bureau of Indian Affairs' Division of Real Estate Services, 1849 C Street, NW, MS-4512-MIB, Washington, D.C. 20240. All Bureau oil and gas regional offices and the surety are being informed of this action.

In cases where you have existing individual and/or collective bonds on file with one or more of our regional offices, you may now request those offices, directly, to terminate in lieu of coverage under this Nationwide Bond.

Enclosed is a copy of the approved bond for your files. If we may be of further assistance in this matter, please advise.

Sincerely,

Director, Office of Trust Responsibilities

**ACTING**

Enclosure



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

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

IN REPLY REFER TO  
UT-922

February 27, 2003

Westport Oil and Gas Company, L.P.  
Attn: Gary D. Williamson  
1670 Broadway, Suite 2800  
Denver, Colorado 80202

Re: Natural Buttes Unit  
Uintah County, Utah

Gentlemen:

On February 27, 2003, we received an indenture dated December 17, 2002, whereby El Paso Production Oil & Gas Company resigned as Unit Operator and Westport Oil and Gas Company, L.P., was designated as Successor Unit Operator for the Natural Buttes Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective February 27, 2003. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Natural Buttes Unit Agreement.

Your nationwide (Colorado) oil and gas bond No. 1203 will be used to cover all operations within the Natural Buttes Unit.

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

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks  
Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Vernal (w/enclosure)  
SITLA  
Division of Oil, Gas & Mining  
Minerals Adjudication Group  
File - Natural Buttes Unit (w/enclosure)  
Agr. Sec. Chron  
Fluid Chron

UT922:TAThompson:tt:02/27/2003

RECEIVED

FEB 28 2003

DIV. OF OIL, GAS & MINING

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

		5. LEASE DESIGNATION AND SERIAL NUMBER:
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: <b>Exhibit "A"</b>
2. NAME OF OPERATOR: <b>El Paso Production Oil &amp; Gas Company</b>		9. API NUMBER:
3. ADDRESS OF OPERATOR: <b>9 Greenway Plaza Houston TX 77064-0995</b>		10. FIELD AND POOL, OR WILDCAT:
PHONE NUMBER: <b>(832) 676-5933</b>		
4. LOCATION OF WELL		
FOOTAGES AT SURFACE:		COUNTY:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		STATE: <b>UTAH</b>

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of work completion: _____	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" 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 type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

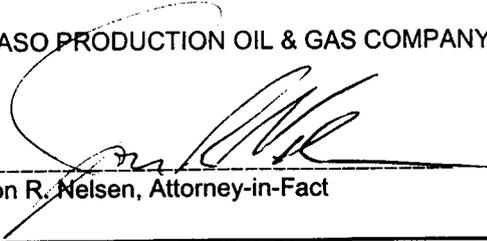
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Operator change to Westport Oil and Gas Company, L.P., 1670 Broadway, Suite 2800, Denver, CO. 80202-4800, effective December 17, 2002.

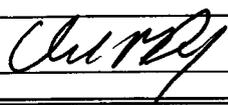
BOND # \_\_\_\_\_

State Surety Bond No. RLB0005236  
Fee Bond No. RLB0005238

EL PASO PRODUCTION OIL & GAS COMPANY

By:   
Jon R. Nelsen, Attorney-in-Fact

**RECEIVED**  
**FEB 28 2003**  
DIV. OF OIL, GAS & MINING

<b>WESTPORT OIL AND GAS COMPANY, L.P.</b>	
NAME (PLEASE PRINT) <b>David R. Dix</b>	TITLE <b>Agent and Attorney-in-Fact</b>
SIGNATURE 	DATE <b>12/17/02</b>

(This space for State use only)

Form 3160-5  
(August 1999)

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 November 30, 2000

5. Lease Serial No.  
**SEE ATTACHED EXHIBIT "A"**

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

**SEE ATTACHED EXHIBIT "A"**

9. API Well No.

**SEE ATTACHED EXHIBIT "A"**

10. Field and Pool, or Exploratory Area

11. County or Parish, State

UINTAH COUNTY, UT

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

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

WESTPORT OIL & GAS COMPANY, L.P.

3a. Address

P.O. BOX 1148 VERNAL, UT 84078

3b. Phone No. (include area code)

(435) 781-7023

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

**SEE ATTACHED EXHIBIT "A"**

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>SUCCESSOR OF</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<b>OPERATOR</b>

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 zone. 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 if testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator determined that the site is ready for final inspection.

WESTPORT OIL & GAS COMPANY, L.P., IS CONSIDERED TO BE THE OPERATOR ON THE ATTACHED DESCRIBED LANDS AND IS RESPONSIBLE UNDER THE TERMS AND CONDITIONS OF THE LEASE FOR THE OPERATIONS CONDUCTED ON THE LEASED LANDS OR PORTIONS THEREOF, BOND COVERAGE FOR THIS WELL IS PROVIDED BY FEDERAL NATIONWIDE BOND NO. 158626364, EFFECTIVE FEBRUARY 1, 2002, AND BIA NATIONWIDE BOND NO. RLB0005239, EFFECTIVE FEBRUARY 10, 2003.

RECEIVED  
MAR 04 2003

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

Name (Printed/Typed)

CHERYL CAMERON

Title

OPERATIONS

Signature

Date

March 4, 2003

~~BUREAU OF OIL, GAS & MINING~~

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

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

Office

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

(Instructions on reverse)



6. (R649-9-2)Waste Management Plan has been received on: IN PLACE

7. **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-12/31/2003 BIA-12/5/02

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: 02/27/2003

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: N/A

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

**DATA ENTRY:**

1. Changes entered in the Oil and Gas Database on: 03/24/2003
2. Changes have been entered on the Monthly Operator Change Spread Sheet on: 03/24/2003
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

**STATE WELL(S) BOND VERIFICATION:**

1. State well(s) covered by Bond Number: RLB 0005236

**FEDERAL WELL(S) BOND VERIFICATION:**

1. Federal well(s) covered by Bond Number: 158626364

**INDIAN WELL(S) BOND VERIFICATION:**

1. Indian well(s) covered by Bond Number: RLB 0005239

**FEE WELL(S) BOND VERIFICATION:**

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number RLB 0005238
2. The **FORMER** operator has requested a release of liability from their bond on: N/A  
The Division sent response by letter on: N/A

**LEASE INTEREST OWNER NOTIFICATION:**

3. (R649-2-10) The **FORMER** 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:**

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

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.

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

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
 WESTPORT OIL & GAS COMPANY, L.P.

3a. Address  
 P.O. BOX 1148 VERNAL, UT 84078

3b. Phone No. (include area code)  
 (435) 781-4304733709

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
 Multiple Wells - see attached  
 DS 22E 11

5. Lease Serial No.  
 Multiple Wells - see attached

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
 891008900A

8. Well Name and No.  
 Multiple Wells - see attached

9. API Well No.  
 Multiple Wells - see attached

10. Field and Pool, or Exploratory Area  
 Natural Buttes Unit

11. County or Parish, State  
 Uintah County, UT

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"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<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
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input type="checkbox"/> Other

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 recomplate 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 recomplate 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.

Westport Oil & Gas requests a variance to Onshore Order No. 4, Part IIIC.a. requiring each sales tank be equipped with a pressure-vacuum thief hatch and/or vent line valve. The variance is requested as an economic analysis shows the value of the shrunk condensate will not payout the incremental cost of purchasing and maintaining the valve resulting in a loss of value over the producing life of the well.

The volume lost to shrinkage by dropping the tank pressure from 6 ozs. to 0 psig is shown to be 0.3% of the tank volume. This was determined by lab analysis of a representative sample from the field. The sample shrunk from 98.82% of original volume to 98.52% when the pressure was dropped.

The average NBU well produces approximately 6 bbls condensate per month. The resulting shrinkage would amount to 0.56 bbls per month lost volume due to shrinkage. The value of the shrunk and lost condensate does not recoup or payout the cost of installing and maintaining the valves and other devices that hold the positive tank pressure. An economic run based on the loss and costs is attached.

Westport Oil & gas requests approval of this variance in order to increase the value of the well to the operator and the mineral royalty owners.

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

Name (Printed/Typed) J.T. Conley Title Operations Manager  
 Signature *J.T. Conley* Date 9-2-2003  
 Initials CHD Date 9-2-2003  
 SEP 10 2003  
 DIV OF OIL GAS AND MINING

THIS SPACE FOR FEDERAL OR STATE USE

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
 Office Oil, Gas and Mining  
 Date: 9/16/03  
 Accepted by the Utah Division of Oil, Gas and Mining  
 Federal Approval of This Action is Necessary

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

**Project Economics Worksheet**

Instructions: Fill in blue boxes with before and after project data. The evaluation results are shown below and graphed automatically at the bottom of the page. This sheet is protected to prevent accidental alteration of the formulas. See JIC for changes. OPX entered as annual costs and/or as unit OPX costs for \$/BF and \$/MCF

Project Name: **Condensate Shrinkage Economics**

Is this job a well pull or production rig job ??? **N** (Y or N)

	BEFORE \$/Year	AFTER \$/Year	DIFFERENCE \$/Year
Gross Oil Revenue	\$1,088	\$1,099	\$11
Gross Gas Revenue	\$0	\$0	\$0
NGL Revenue	\$0	\$0	\$0
PULING UNIT SERVICE			\$0
WIRELINE SERVICE			\$0
SUBSURF EQUIP REPAIRS			\$0
COMPANY LABOR			\$0
CONTRACT LABOR	\$0	\$200	\$200
CONTR SERVICE			\$0
LEASE FUEL GAS	\$0	\$0	\$0
UTILITIES - ELECTRICITY	\$0	\$0	\$0
CHEMICAL TREATING			\$0
MATERIAL & SUPPLY	\$0	\$150	\$150
WATER & HAULING			\$0
ADMINISTRATIVE COSTS			\$0
GAS PLANT PROCESSING			\$0
<b>Totals</b>	<b>\$0</b>	<b>\$350</b>	<b>\$350</b>

**Increased OPX Per Year**

**Investment Breakdown:**

	Cap/Exp Code	Cost, \$
Capital \$	820/830/840	\$1,200
Expense \$	830/860	\$0
Total \$		\$1,200

Oil Price	\$ 23.00	\$/BO
Gas Price	\$ 3.10	\$/MCF
Electric Cost	\$ -	\$/ HP / day
OPX/BF	\$ 2.00	\$/BF
OPX/MCF	\$ 0.62	\$/MCF

**Production & OPX Detail:**

	Before		After		Difference	
Oil Production	0.192	BOPD	0.194	BOPD	0.002	BOPD
Gas Production	0	MCFPD	0	MCFPD	0	MCFPD
Wtr Production	0	BWPD	0	BWPD	0	BWPD
Horse Power		HP		HP	0	HP
Fuel Gas Burned		MCFPD		MCFPD	0	MCFPD

Project Life: Life = **20.0** Years  
(Life no longer than 20 years)

Internal Rate of Return:  
After Tax IROR = **#DIV/0!**

AT Cum Cashflow:  
Operating Cashflow = **(\$2,917)** (Discounted @ 10%)

**Payout Calculation:**

$$\text{Payout} = \frac{\text{Total Investment}}{\text{Sum(OPX + Incremental Revenue)}} = 1$$

Payout occurs when total AT cashflow equals investment  
See graph below, note years when cashflow reaches zero

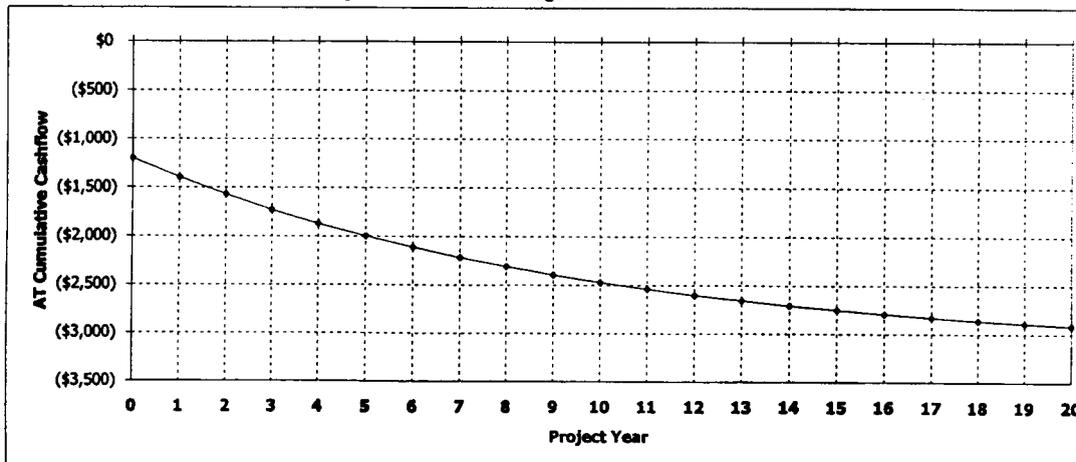
Payout = **NEVER** Years or **#VALUE!** Days

Gross Reserves:  
Oil Reserves = **6** BO  
Gas Reserves = **0** MCF  
Gas Equiv Reserves = **38** MCFE

**Notes/Assumptions:**

**An average NBV well produces 0.192 Bcpd with no tank pressure. The production is increased to 0.194 Bcpd if 4 ozs of pressure are placed on the tank. The increased production does not payout the valve cost or the estimated annual maintenance costs.**

Project: Condensate Shrinkage Economics



**Westport Oil and Gas, Inc.**

**NBU/Ouray Field**

RFL 2003-022

**COMPARISON OF FLASH BACK PRESSURES**

Calculated by Characterized Equation-of-State

Flash Conditions		Gas/Oil Ratio (scf/STbbl) (A)	Specific Gravity of Flashed Gas (Air=1.000)	Separator Volume Factor (B)	Separator Volume Percent (C)
psig	°F				

**Calculated at Laboratory Flash Conditions**

80	70			1.019	
0	122	30.4	0.993	1.033	101.37%
0	60	0.0	—	1.000	98.14%

**Calculated Flash with Backpressure using Tuned EOS**

80	70			1.015	
6.0 oz	65	24.6	0.777	1.003	98.82%
0	60	0.0	—	1.000	98.52%
80	70			1.015	
4.0 oz	65	24.7	0.778	1.003	98.82%
0	60	0.0	—	1.000	98.52%
80	70			1.015	
2.0 oz	65	24.7	0.779	1.003	98.82%
0	60	0.0	—	1.000	98.52%
80	70			1.015	
0	65	24.8	0.780	1.003	98.82%
0	60	0.0	—	1.000	98.52%

(A) Cubic Feet of gas at 14.696 psia and 60 °F per Barrel of Stock Tank Oil at 60 °F.

(B) Barrels of oil at indicated pressure and temperature per Barrel of Stock Tank Oil at 60 °F.

(C) Oil volume at indicated pressure and temperature as a percentage of original saturated oil volume.

Note: Bubblepoint of sample in original sample container was 80 psig at 70° F with 1 cc water

WELL	LEGALS	STFLEASENO	CANUMBER	APINO
NBU 332	10-10-21 NWSW	UTU01416A	891008900A	430473364000S1
NBU 333	13-10-21 SWSW	ML23608	891008900A	430473364100S1 ✓
NBU 335	4-10-22 SENE	UTU01191	891008900A	430473372400S1
NBU 336	4-10-22 NWNE	U-01191	891008900A	430473402700S1
NBU 337	4-10-22 SENW	U-01191-A	891008900A	430473402000S1
NBU 338	5-10-22 NESE	UTU01191	891008900A	430473405800S1
NBU 339	5-10-22 NWSE	UTU01191	891008900A	430473440600S1
NBU 340	6-10-22 SWNE	UTU01195	891008900A	430473372500S1
NBU 340X	6-10-22 SWNE	UTU01195	891008900A	430473401500S1
NBU 341	6-10-22 SWNW	UTU464	891008900A	430473372600S1
NBU 342	7-10-22 NWSE	UTU468	891008900A	430473372700S1
NBU 343	8-10-22 NWNE	UTU01196C	891008900A	430473371900S1
NBU 344	8-10-22 SWNE	UTU01196C	891008900A	430473402100S1
NBU 345	10-10-22 SWNE	UTU02587	891008900A	430473370400S1 ✓
NBU 345-4E	4-10-21 SWSW	UTU01393B	891008900A	430473470000S1 ✓
NBU 347	11-10-22 NWSW	UTU01197A	891008900A	430473370900S1 ✓
NBU 348	11-10-22 SWSW	UTU01197A-ST	891008900A	430473400100S1
NBU 349	11-10-22 SWSE	UTU01197A-ST	891008900A	430473400200S1 ✓
NBU 350	14-10-22 NWNE	UTU01197A	891008900A	430473364200S1 ✓
NBU 351	30-10-22 SESE	UTU0132568A	891008900A	430473366800S1
NBU 352	9-9-21 SWNW	UTU0149767	891008900A	430473392200S1
NBU 353	27-9-21 SENW	U01194A	891008900A	430473320500S1 ✓
NBU 354	31-9-22 NENW	UTU464	891008900A	430473323100S1
NBU 356	30-9-22 NENW	U463	891008900A	430473323200S1
NBU 357	15-10-21 SWSW	UTU01791A	891008900A	430473372800S1
NBU 358	16-10-21 SESW	ML10755	891008900A	430473370800S1
NBU 359	29-10-21 NWNE	ML21330	891008900A	430473370600S1
NBU 360	29-10-22 SESW	UTU0145824	891008900A	430473377300S1
NBU 361	32-10-22 NWNW	ML22798	891008900A	430473370500S1 ✓
NBU 362	28-9-21 SESW	UTU0576	891008900A	430473377400S1
NBU 363	28-9-21 SESE	UTU0576	891008900A	430473377500S1
NBU 364	29-9-21 SESE	UTU0581	891008900A	430473377600S1
NBU 365	3-10-21 SESE	UTU0149078	891008900A	430473377700S1
NBU 366	10-10-21 NWNW	UTU0149079	891008900A	430473372900S1
NBU 367	11-10-22 NESW	UTU01197A-ST	891008900A	430473370700S1 ✓
NBU 370	17-9-21 NWSW	UTU0575	891008900A	430473467200S1 ✓
NBU 371	8-9-21 SWSE	UTU0575B	891008900A	430473467300S1 ✓
NBU 375	12-9-21 SWNE	UTU0141317	891008900A	430473444000S1 ✓
NBU 376	12-9-21 NENE	UTU0141317	891008900A	430473444100S1 ✓
NBU 377	31-9-21 NENW	UTU0582	891008900A	430473436300S1
NBU 378	31-9-21 NWNE	UTU0582	891008900A	430473436400S1
NBU 381	23-10-22 SESW	UTU01198B	891008900A	430473423400S1
NBU 382	22-10-22 SENW	U-01198-B	891008900A	430473423500S1
NBU 383	21-10-22 SESW	U-489	891008900A	430473423600S1
NBU 384	30-10-22 SENW	UTU0132568A	891008900A	430473423700S1 ✓
NBU 385	18-10-22 SENW	ML22973	891008900A	430473422800S1
NBU 386	17-10-22 NESE	UTU470	891008900A	430473423800S1
NBU 387	23-10-21 SWSE	U-02277-A	891008900A	430473423900S1
NBU 388	22-10-21 SENW	U-02278-A	891008900A	430473424000S1
NBU 389	28-10-21 NENE	ML21329	891008900A	430473422900S1
NBU 390	30-10-21 SESE	ML22793	891008900A	430473423000S1
NBU 391	17-9-21 NWNW	UTU0575	891008900A	430473487400S1
NBU 393	22-9-20 SWNW	U0577B	891008900A	430473486400S1
NBU 394	11-10-22 SWSE	UTU01197A-ST	891008900A	430473480400S1 ✓
NBU 395	27-9-21 SWSW	UTU01194A-ST	891008900A	430473437400S1 ✓
NBU 396	33-9-21 NENW	UTU0576	891008900A	430473448000S1 ✓
NBU 397	26-10-20 NESW	UTU4476	891008900A	430473436500S1
NBU 398	18-10-21 NENW	UTU02270A	891008900A	430473436600S1
NBU 399	14-10-21 NWNW	UTU465	891008900A	430473440900S1
NBU 400	16-10-21 NENW	ML10755	891008900A	430473479400S1
NBU 401	23-10-21 NENE	UTU02278A	891008900A	430473480100S1
NBU 404	32-9-22 SWSE	ML22649	891008900A	430473437500S1 ✓
NBU 405	27-9-21 NENE	UTU01194A-ST	891008900A	430473440700S1 ✓
NBU 407	32-10-22 NENW	ML22798	891008900A	430473431800S1 ✓
NBU 408	31-10-22 NENE	UTU0143551	891008900A	430473459000S1 ✓
NBU 409	32-9-21 NWSW	ML48758	891008900A	430473442100S1 ✓
NBU 410	32-9-21 SWSW	ML48758	891008900A	430473487200S1
NBU 411	32-9-21 SESE	ML48758	891008900A	430473442200S1 ✓
NBU 412	32-10-22 SENW	ML22798	891008900A	430473431900S1 ✓
NBU 413	32-10-22 SWNW	ML22798	891008900A	430473432000S1 ✓
NBU 414	31-10-22 SENE	UTU0143551	891008900A	430473438700S1
NBU 414-20E	20-9-21 NWNE	U0143551/U0575	891008900A	430473477900S1
NBU 415-20E	20-9-21 SWNE	UTU0575	891008900A	430473448900S1 ✓
NBU 416	36-9-20 SESE	ML48757	891008900A	430473442300S1 ✓
NBU 418	12-9-21 NWNW	UTU0141317	891008900A	430473477700S1



## NBU 347 CONVERSION TO INJECTION

### GENERALIZED PROCEDURE:

- All perforation depths will be from the Schlumberger DSI/CNL/CBL/LQC log dated 17 April 2002.
- **Perforations and fracture stages are conceptual at present.** Exact perforation intervals, shot densities and treating stage designs are to be determined.

### PROCEDURE:

1. Notify EPA two weeks in advance so that EPA representative may be present for wellwork operations.
2. MIRU. NU & test BOP. TOH with tubing.
3. TIH with bit on tubing and clean out to 6780' PBTD. Circulate hole clean with 2% KCL. POOH.
4. **Plug #1:** RU wireline and set CICR at ~5750''. Establish injection rate and cement squeeze perforations across gross interval 5780' through 6654' with a minimum of 70 sx (80.5 cuft) Class G cement. Sting out of CICR and spot 2 sx cement on top. Circulate tubing clean and TOH.
5. Pressure test casing and BOP to 5000 psi.
6. Perforate sandstone zones in the gross interval 4883' through 5018' with 3-1/8" HSC, 0.35" hole. Breakdown perfs and establish injection rate. Fracture with conventional gelled water system containing 20/40 mesh sand. Under-displace to ~4850'.
7. Set 5000 psi CBP at ~4825'. Perforate sandstone zones in the gross interval 4718' through 4814' with 3-1/8" HSC, 0.35" hole. Breakdown perfs and establish injection rate. Fracture with conventional gelled water system containing 20/40 mesh sand. Under-displace to ~4675'.
8. Set 5000 psi CBP at ~4600'.
9. TIH with 3 7/8" bit on tubing. Drill out CBP's and clean out to new PBTD of ~5724'. TOH laying down old tubing.
10. PU profile nipple, 6' tubing sub, retrievable packer, on/off tool and new 2 3/8" tubing and TIH to ~4690'. Circulate packer fluid and freeze blanket in place, set packer and land tubing.
11. ND BOPE and NU wellhead. Conduct MIT per EPA guidelines to satisfaction of EPA representative.
12. RDMO

NBU 347  
 NWSW-Sec. 11-T10S-R22E  
 Underground Injection Control  
 Permit Application

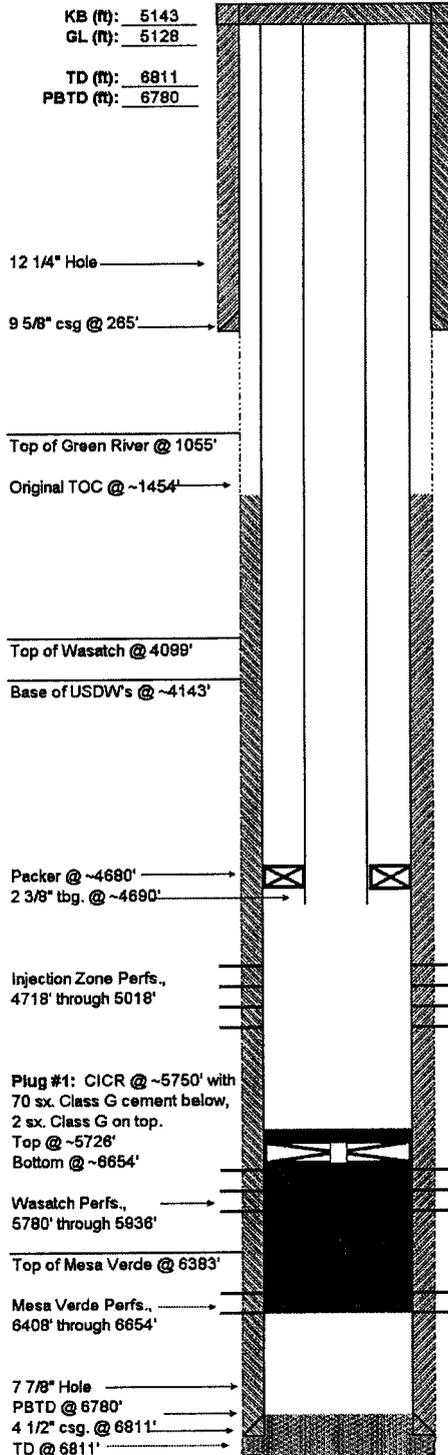
ATTACHMENT M2

WELL: NBU 347  
 FIELD: NATURAL BUTTES  
 API # 43-047-33709  
 LEASE #: U-01197-A-ST  
 EPA PERMIT #:

CNTY: UINTAH  
 STATE: UTAH

FT.: 1697' FSL, 411' FWL  
 Q-Q: NWSW  
 SEC.: 11  
 TWS: 10S  
 RGE: 22E

PROPOSED WELLBORE DIAGRAM



CASING RECORD

HOLE (in)	SIZE (in)	WT (lb/ft)	GRADE	TOP (ft)	BTM (ft)
12 1/4	9 5/8	36	K-55	0	265
7 7/8	4 1/2	11.6	K-55	0	6811

TUBING RECORD

SIZE (in)	WT (lb/ft)	GRADE	TOP (ft)	BTM (ft)
2 3/8	4.7	J-55	0	~4690

ITEM	MAKER	SIZE (in)	TOP (ft)
On/Off Tool	TBD	2 3/8	~4678
Packer	TBD	4 1/2	~4680
6' tbq. sub	TBD	2 3/8	~4689
RN nipple	TBD	2 3/8	~4690

PERFORATION RECORD

ZONE	TOP (ft)	BTM (ft)	SPF	DATE SHOT	STATUS
<b>PROPOSED INJECTION PERFORATIONS</b>					
Wasatch	4718	4749	4	NEW	PROPOSED
Wasatch	4763	4780	4	NEW	PROPOSED
Wasatch	4795	4814	4	NEW	PROPOSED
Wasatch	4883	4922	4	NEW	PROPOSED
Wasatch	4888	5018	4	NEW	PROPOSED

EXCLUDED PRODUCTION PERFORATIONS

ZONE	TOP (ft)	BTM (ft)	SPF	DATE SHOT	STATUS
Wasatch	5780	5876	4	5/7/02	SQZD.
Wasatch	5930	5936	4	5/7/02	SQZD.
Mesa Verde	6408	6414	4	5/7/02	SQZD.
Mesa Verde	6430	6436	4	5/7/02	SQZD.
Mesa Verde	6604	6610	4	5/3/02	SQZD.
Mesa Verde	6648	6654	4	5/3/02	SQZD.

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

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b></p> <p>Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.                  Use APPLICATION FOR PERMIT – for such proposals</p>		6. Lease Designation and Serial Number U-01197-A-ST
		7. Indian Allottee or Tribe Name
		8. Unit or Communitization Agreement NATURAL BUTTES
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)		9. Well Name and Number NBU 347
2. Name of Operator WESTPORT OIL & GAS COMPANY, L.P.		10. API Well Number 43-047-33709
3. Address of Operator 1368 SOUTH 1200 EAST, VERNAL, UTAH 84078	4. Telephone Number 435-781-7060	11. Field and Pool, or Wildcat NATURAL BUTTES
5. Location of Well Footage : 1697' FSL 411' FWL      County : UINTAH QQ, Sec, T., R., M : NWSW SEC 11-T10S-R22E      State : UTAH		

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

<p align="center"><b>NOTICE OF INTENT</b> (Submit in Duplicate)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Abandonment</td> <td><input type="checkbox"/> New Construction</td> </tr> <tr> <td><input type="checkbox"/> Casing Repair</td> <td><input type="checkbox"/> Pull or Alter Casing</td> </tr> <tr> <td><input checked="" type="checkbox"/> Change of Plans</td> <td><input type="checkbox"/> Recompletion</td> </tr> <tr> <td><input type="checkbox"/> Conversion to Injection</td> <td><input type="checkbox"/> Shoot or Acidize</td> </tr> <tr> <td><input type="checkbox"/> Fracture Treat</td> <td><input type="checkbox"/> Vent or Flare</td> </tr> <tr> <td><input type="checkbox"/> Multiple Completion</td> <td><input type="checkbox"/> Water Shut-Off</td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td></td> </tr> </table> <p>Approximate Date Work Will Start <u>WHEN APPROVED</u></p>	<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input checked="" type="checkbox"/> Change of Plans	<input type="checkbox"/> Recompletion	<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Shoot or Acidize	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____		<p align="center"><b>SUBSEQUENT REPORT</b> (Submit Original Form Only)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Abandonment *</td> <td><input type="checkbox"/> New Construction</td> </tr> <tr> <td><input type="checkbox"/> Casing Repair</td> <td><input type="checkbox"/> Pull or Alter Casing</td> </tr> <tr> <td><input type="checkbox"/> Change of Plans</td> <td><input type="checkbox"/> Shoot or Acidize</td> </tr> <tr> <td><input type="checkbox"/> Conversion to Injection</td> <td><input type="checkbox"/> Vent or Flare</td> </tr> <tr> <td><input type="checkbox"/> Fracture Treat</td> <td><input type="checkbox"/> Water Shut-Off</td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td></td> </tr> </table> <p>Date of Work Completion _____</p> <p><small>Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.                  * Must be accompanied by a cement verification report.</small></p>	<input type="checkbox"/> Abandonment *	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Shoot or Acidize	<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____	
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<input type="checkbox"/> Other _____																											

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

WESTPORT OIL & GAS COMPANY PROPOSES TO CONVERT THE NBU 347 WELL FROM A PRODUCING WELL TO A CLASS II WATER INJECTION WELL TO DISPOSE OF PRODUCED WATERS FROM NBU WELLS AS PER THE ATTACHED PROCEDURES.

APPLICATION TO THE EPA-UIC FOR A CLASS II INJECTION WELL WILL BE MADE ON 3/29/04.

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

**RECEIVED**  
**APR 05 2004**  
 DIV. OF OIL, GAS & MINING

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

Name & Signature DEBRA DOMENICI *Debra Domenici* Title SR ADMIN ASSIST Date 03/26/04

(State Use Only)

## NBU 347 CONVERSION TO INJECTION

### GENERALIZED PROCEDURE:

- All perforation depths will be from the Schlumberger DSI/CNL/CBL/LQC log dated 17 April 2002.
- **Perforations and fracture stages are conceptual at present.** Exact perforation intervals, shot densities and treating stage designs are to be determined.

### PROCEDURE:

1. Notify EPA two weeks in advance so that EPA representative may be present for wellwork operations.
2. MIRU. NU & test BOP. TOH with tubing.
3. TIH with bit on tubing and clean out to 6780' PBTD. Circulate hole clean with 2% KCL. POOH.
4. **Plug #1:** RU wireline and set CICR at ~5750'. Establish injection rate and cement squeeze perforations across gross interval 5780' through 6654' with a minimum of 70 sx (80.5 cuft) Class G cement. Sting out of CICR and spot 2 sx cement on top. Circulate tubing clean and TOH.
5. Pressure test casing and BOP to 5000 psi.
6. Perforate sandstone zones in the gross interval 4883' through 5018' with 3-1/8" HSC, 0.35" hole. Breakdown perfs and establish injection rate. Fracture with conventional gelled water system containing 20/40 mesh sand. Under-displace to ~4850'.
7. Set 5000 psi CBP at ~4825'. Perforate sandstone zones in the gross interval 4718' through 4814' with 3-1/8" HSC, 0.35" hole. Breakdown perfs and establish injection rate. Fracture with conventional gelled water system containing 20/40 mesh sand. Under-displace to ~4675'.
8. Set 5000 psi CBP at ~4600'.
9. TIH with 3 7/8" bit on tubing. Drill out CBP's and clean out to new PBTD of ~5724'. TOH laying down old tubing.
10. PU profile nipple, 6' tubing sub, retrievable packer, on/off tool and new 2 3/8" tubing and TIH to ~4690'. Circulate packer fluid and freeze blanket in place, set packer and land tubing.
11. ND BOPE and NU wellhead. Conduct MIT per EPA guidelines to satisfaction of EPA representative.
12. RDMO





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18th STREET - SUITE 300  
DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

OCT 6 2004

Ref: 8P-W-GW

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. John T. Conley  
Western Division Manager  
Westport Oil & Gas Co., L.P.  
1670 Broadway - Suite 2800  
Denver, CO 80202

Re: UNDERGROUND INJECTION CONTROL  
PERMIT (UIC)  
Final Salt Water Disposal Permit  
UT20973-06399  
NBU No. 347 SWD  
Uintah County, Utah

Dear Mr. Conley:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed NBU 347 SWD, in Uintah County, Utah. A Statement of Basis, which discusses development of the conditions and requirements of the Permit, also is included.

The Public Comment period ended on SEP 23 2004. There were no comments on the Draft Permit received during the Public Notice period, and therefore the Final Permit becomes effective on the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect on the date that this Permit becomes effective.

Please note that under the terms of the Final Permit, you are authorized only to construct the proposed injection well, and must fulfill the "Prior to Commencing Injection" requirements of the Permit, Part II Section C Subpart 1 and obtain written Authorization to Inject prior to commencing injection. It is your responsibility to be familiar with and to comply with all provisions of the Final Permit.

The Permit and the authorization to inject are issued for the operating life of the well unless terminated (Part III, Section B). The EPA will review this Permit at least every five (5) years to determine whether action under 40 CFR § 144.36(a) is warranted.



Printed on Recycled Paper

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Emmett Schmitz of my staff at (303) 312-6174, or toll-free at 1-800-227-8917 (Ext. 6174).

Sincerely,



Stephen S. Tuber  
Assistant Regional Administrator  
Office of Partnerships and Regulatory Assistance

enclosure: Final UIC Permit  
Statement of Basis  
Form No. 7520-07 (Application to Transfer Permit)  
Form No. 7520-10 (Completion Report)  
Form No. 7520-11 (Monitoring Report)  
Form No. 7520-12 (Well Rework Record)  
Form No. 7520-14 (Plugging Record)  
Ground Water Section Guidance No. 35  
Ground Water Section Guidance No. 39

cc: Maxine Natchees  
Chairperson  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Elaine Willie  
Environmental Coordinator  
Ute Indian Tribe

Chester Mills  
Superintendent  
Bureau of Indian Affairs  
Uintah & Ouray Indian Agency

Carrol Estes  
Environmentalist  
Westport Oil & Gas Company, L.P.  
Vernal, UT 84078



**Gil Hunt**  
**Technical Services Manager**  
**State of Utah - Natural Resources**

**Don Forsman**  
**Sr. Petroleum Engineer**  
**Bureau of Land Management**  
**Vernal District**



**UNDERGROUND INJECTION CONTROL PROGRAM  
PERMIT**

PREPARED: September 2004

**Permit No. UT20973-06399**

**Class II Salt Water Disposal Well**

**NBU 347 SWD  
Uintah County, UT**

Issued To

**Westport Oil and Gas Company, L.P.**

1670 Broadway

Suite 2800

Denver, CO 80202-4801

## Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Westport Oil and Gas Company, L.P.  
1670 Broadway  
Suite 2800  
Denver, CO 80202-4801

is authorized to construct and to operate the following Class II injection well or wells:

NBU 347 SWD  
1697 FSL, 411 FEL, NWSW S11, T10S, R22E  
Uintah County, UT

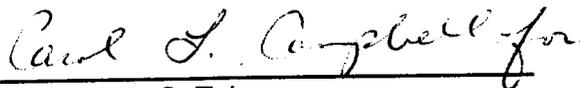
Permit requirements herein are based on regulations found in 40 CFR Parts 124, 144, 146, and 147 which are in effect on the Effective Date of this Permit.

This Permit is based on representations made by the applicant and on other information contained in the Administrative Record. Misrepresentation of information or failure to fully disclose all relevant information may be cause for termination, revocation and reissuance, or modification of this Permit and/or formal enforcement action. This Permit will be reviewed periodically to determine whether action under 40 CFR 144.36(a) is required.

This Permit is issued for the life of the well or wells unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for this program is delegated to an Indian Tribe or a State. Upon the effective date of delegation, all reports, notifications, questions and other compliance actions shall be directed to the Indian tribe or State Program Director or designee.

Issue Date: \_\_\_\_\_

Effective Date \_\_\_\_\_



Stephen S. Tuber  
Assistant Regional Administrator\*  
Office of Partnerships and Regulatory Assistance

\*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

## PART II. SPECIFIC PERMIT CONDITIONS

### Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

#### **1. Casing and Cement.**

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

#### **2. Injection Tubing and Packer.**

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

#### **3. Sampling and Monitoring Devices.**

The Permittee shall install and maintain in good operating condition:

- (a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and
- (b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:
  - (i) on the injection tubing; and
  - (ii) on the tubing-casing annulus (TCA); and
- (c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure specified in APPENDIX C is reached at the wellhead; and
- (d) a non-resettable cumulative volume recorder attached to the injection line.

#### **4. Well Logging and Testing**

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

#### **5. Postponement of Construction or Conversion**

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate can be reissued.

#### **6. Workovers and Alterations**

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

### **Section B. MECHANICAL INTEGRITY**

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

- (a) There is no significant leak in the casing, tubing, or packer (Part I); and
- (b) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection well bore (Part II).

### **1. Demonstration of Mechanical Integrity (MI).**

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

### **2. Mechanical Integrity Test Methods and Criteria**

EPA-approved methods shall be used to demonstrate mechanical integrity. A current copy of Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are provided at issuance of this Permit.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

### **3. Notification Prior to Testing.**

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

### **4. Loss of Mechanical Integrity.**

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit), and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

## **Section C. WELL OPERATION**

**INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.**

Injection is approved under the following conditions:

### **1. Requirements Prior to Commencing Injection.**

Injection operation may commence only after all construction and pre-injection requirements herein have been met and approved. Except for new wells authorized by an Area Permit under 40 CFR 144.33 (c), the Permittee may not commence injection until construction is complete, and

- (a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and
  - (i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or
  - (ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

### **2. Injection Interval.**

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

### **3. Injection Pressure Limitation**

- (a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injected or formation fluids into a USDW.
- (b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permittee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

#### **4. Injection Volume Limitation.**

Injection volume is limited to the total volume specified in APPENDIX C.

#### **5. Injection Fluid Limitation.**

Injected fluids are limited to those which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). The well also may be used to inject approved Class II wastes brought to the surface such as drilling fluids and spent well completion, treatment and stimulation fluids. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved. This well is NOT approved for commercial brine or other fluid disposal operation.

#### **6. Tubing-Casing Annulus (TCA)**

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

### **Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS**

#### **1. Monitoring Parameters, Frequency, Records and Reports.**

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

- (a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;
- (b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;
- (c) the analytical techniques or methods used for analysis.

#### **2. Monitoring Methods.**

- (a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

- (b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.
- (c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.
- (d) Pressures are to be measured in pounds per square inch (psi).
- (e) Fluid volumes are to be measured in standard oil field barrels (bbl).
- (f) Fluid rates are to be measured in barrels per day (bbl/day).

### **3. Records Retention.**

- (a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.
- (b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.
- (c) The Permittee shall retain records at the location designated in APPENDIX D.

### **4. Annual Reports.**

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D. The report of fluids injected during the year must identify each new fluid source by well name and location, and the field name or facility name.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

## Section E. PLUGGING AND ABANDONMENT

### **1. Notification of Well Abandonment, Conversion or Closure.**

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

### **2. Well Plugging Requirements**

Prior to abandonment, the injection well shall be plugged with cement in a manner which prevents the movement of fluids into or between underground sources of drinking water. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director. The well shall be plugged in accordance with the approved plugging and abandonment plan and with 40 CFR 146.10.

### **3. Approved Plugging and Abandonment Plan.**

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

### **4. Forty Five (45) Day Notice of Plugging and Abandonment.**

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abandonment plan.

### **5. Plugging and Abandonment Report.**

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

- (a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or
- (b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

### **6. Inactive Wells.**

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

- (a) Provides written notice to the Director;

- (b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and
- (c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

## PART III. CONDITIONS APPLICABLE TO ALL PERMITS

### Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

### Section B. CHANGES TO PERMIT CONDITIONS

#### **1. Modification, Reissuance, or Termination.**

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

#### **2. Conversions.**

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

#### **3. Transfer of Permit.**

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

#### **4. Permittee Change of Address.**

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

#### **5. Construction Changes, Workovers, Logging and Testing Data**

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging, or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

### **Section C. SEVERABILITY**

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

### **Section D. CONFIDENTIALITY**

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

### **Section E. GENERAL PERMIT REQUIREMENTS**

#### **1. Duty to Comply.**

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

## **2. Duty to Reapply.**

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

## **3. Need to Halt or Reduce Activity Not a Defense.**

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

## **4. Duty to Mitigate.**

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

## **5. Proper Operation and Maintenance.**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

## **6. Permit Actions.**

This Permit may be modified, revoked and reissued or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

## **7. Property Rights.**

This Permit does not convey any property rights of any sort, or any exclusive privilege.

## **8. Duty to Provide Information.**

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

## **9. Inspection and Entry.**

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

#### **10. Signatory Requirements.**

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

#### **11. Reporting Requirements.**

- (a) **Planned changes.** The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.
- (b) **Anticipated noncompliance.** The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) **Monitoring Reports.** Monitoring results shall be reported at the intervals specified in this Permit.
- (d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.
- (e) **Twenty-four hour reporting.** The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:
  - (i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or
  - (ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

- (f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurrence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website <http://www.nrc.uscg.mil/index.htm>.
- (g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.
- (h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

## **Section F. FINANCIAL RESPONSIBILITY**

### ***1. Method of Providing Financial Responsibility.***

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

### ***2. Insolvency.***

In the event of:

- (a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or
- (b) suspension or revocation of the authority of the trustee institution to act as trustee; or

- (c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

## APPENDIX A

### WELL CONSTRUCTION REQUIREMENTS

See diagram.

#### FORMATION DATA:

- \* Base of Underground Source of Drinking Water (USDW): Located in the Uinta, Green River and Wasatch Formations from the surface to 4143 feet in the Wasatch. Permittee cites top of cement by Schlumberger "CBL from DSI Waveform Energy" at an approximate depth of 1454 feet.
- \* Confining Zone: 4494 feet to 4718 feet. Impervious argillaceous siltstone, mudstone, shale. Annulus cement with 80% bond index cement bond is present from 3980 feet to 5506 feet.
- \* Gross permitted Injection Zone: 4718 feet to plug back total depth which is approximately 5726 feet, i.e., top of Wasatch to the top of the cast iron bridge plug, approximately 5726 feet. Injection intervals are sandstone. All Mesaverde perforations and basal Wasatch perforations will be cement squeezed. Proposed injection will be through new perforations gross 4718 feet to 5018 feet.
- \* Well Total Depth: 6811 feet in the Mesaverde Formation. Permittee will cement squeeze gross Wasatch and Mesaverde perforations 5780 feet to 6654 feet. Set a cast iron cement retainer (CICR) approximately 5750 feet. Two sacks of Class "G" cement on top of CICR. Plug Back Total Depth will approximate 5726 feet.

#### WELL CONSTRUCTION:

- \* 9-5/8 inch surface casing is set in a 12-1/4 inch hole at 265 feet with 130 sacks of Type "V" cement with returns to the surface.
- \* 4-1/2 inch longstring is set in a 7-7/8 inch hole at 6811 feet with 330 sacks of HiLift lead and 883 sacks of 50/50 Pozmix tail. Circulated 23 barrels of cement to pit, then cement fell back to an estimated depth of 1454 feet, which depth is estimated by permittee from processed CBL. EPA identifies 80% bond index cement bond top at 3980 feet to 5506 feet.
- \* 2-3/8 inch tubing, with packer, to be set approximately 4680 feet.

#### WELLHEAD EQUIPMENT:

- \* Sampling tap located to enable the sampling of fluid from the injection tubing.
- \* Sampling tap located to enable the sampling of fluid in the casing/tubing annulus.

\* Pressure gauge isolated by 1/2 inch FIP shut-off valve or quick disconnect valve, and located to enable the reading of pressure in the tubing/casing annulus.

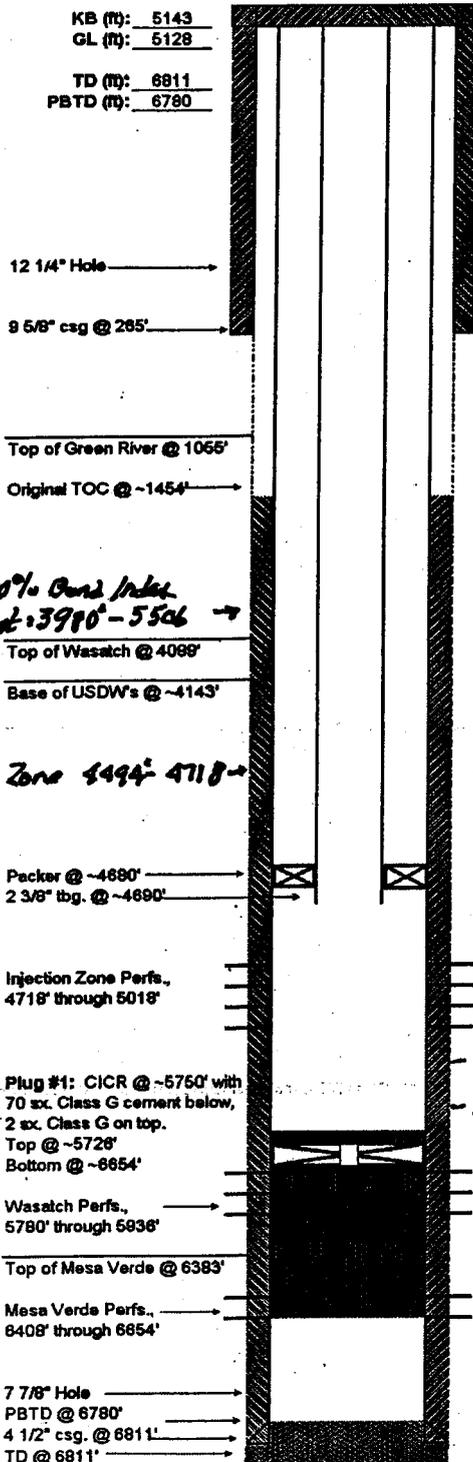
\* Pressure-actuated shut-off device located on the injection line, and set to prevent injection operations from exceeding the maximum allowable surface injection pressure.

\* Non-resettable cumulative volume recorder located on the injection line.

NBU 347  
 NWSW-Sec. 11-T10S-R22E  
 Underground Injection Control  
 Permit Application  
 ATTACHMENT M2

WELL: NBU347      CNTY: UINTAH      FT.: 1697 FSL, 411' FWL  
 FIELD: NATURAL BUTTES      STATE: UTAH      Q-Q: NWSW  
 API #: 43-047-33709      SEC.: 11  
 LEASE #: U-01197-A-ST      TWS: 109  
 EPA PERMIT #:      RGE: 22E

PROPOSED WELLBORE DIAGRAM



CASING RECORD

HOLE (in)	SIZE (in)	WT (lb/ft)	GRADE	TOP (ft)	BTM (ft)
12 1/4	9 5/8	38	K-55	0	285
7 7/8	4 1/2	11.8	K-55	0	6811

TUBING RECORD

SIZE (in)	WT (lb/ft)	GRADE	TOP (ft)	BTM (ft)
2 3/8	4.7	J-55	0	-4880

ITEM	MAKER	SIZE (in)	TOP (ft)
On/Off Tool	TBD	2 3/8	-4878
Packer	TBD	4 1/2	-4880
6' tbq. sub	TBD	2 3/8	-4889
RN nipple	TBD	2 3/8	-4890

PERFORATION RECORD

ZONE	TOP (ft)	BTM (ft)	SPF	DATE SHOT	STATUS
<b>PROPOSED INJECTION PERFORATIONS</b>					
Wasatch	4718	4749	4	NEW	PROPOSED
Wasatch	4783	4790	4	NEW	PROPOSED
Wasatch	4795	4814	4	NEW	PROPOSED
Wasatch	4883	4922	4	NEW	PROPOSED
Wasatch	4988	5018	4	NEW	PROPOSED

EXCLUDED PRODUCTION PERFORATIONS

ZONE	TOP (ft)	BTM (ft)	SPF	DATE SHOT	STATUS
Wasatch	5780	5878	4	5/7/02	SQZD.
Wasatch	5930	5936	4	5/7/02	SQZD.
Mesa Verde	6408	6414	4	5/7/02	SQZD.
Mesa Verde	6430	6436	4	5/7/02	SQZD.
Mesa Verde	6604	6610	4	5/3/02	SQZD.
Mesa Verde	6648	6654	4	5/3/02	SQZD.

Top 80% Bond Index  
 Cement: 3980'-5506' →

Top of Wasatch @ 4089'  
 Base of USDWs @ -4143'

Confining Zone 494'-4718' →

Packer @ -4880'  
 2 3/8" tbq. @ -4890'

Injection Zone Perfs.,  
 4718' through 5018'

Plug #1: CICR @ -5750' with  
 70 sx. Class G cement below,  
 2 sx. Class G on top.  
 Top @ -5728'  
 Bottom @ -6654'

Wasatch Perfs.,  
 5780' through 5936'

Top of Mesa Verde @ 6383'

Mesa Verde Perfs.,  
 6408' through 6654'

7 7/8" Hole  
 PBTD @ 6780'  
 4 1/2" csg. @ 6811'  
 TD @ 6811'

- 5123'-5174' Confining Zone  
 - 3980'-5506' 80% Bond Index Cement

## APPENDIX B

### LOGGING AND TESTING REQUIREMENTS

#### Logs.

Logs will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

#### NO LOGGING REQUIREMENTS

#### Tests.

Tests will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

WELL NAME: NBU 347 SWD	
TYPE OF TEST	DATE DUE
Pore Pressure	Prior to receiving authorization to inject
Standard Annulus Pressure	Prior to receiving authorization to inject
Step Rate Test	Within 3 to 6 months after receiving the authorization to inject

# APPENDIX C

## OPERATING REQUIREMENTS

### MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

WELL NAME	MAXIMUM ALLOWED INJECTION PRESSURE (psi)
	ZONE 1 (Upper)
NBU 347 SWD	1,625

### INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

WELL NAME: NBU 347 SWD	APPROVED INJECTION INTERVAL (KB, ft)		FRACTURE GRADIENT (psi/ft)
	TOP	BOTTOM	
	FORMATION NAME		
Wasatch	4,718.00 - 5,018.00		0.780

### ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

### MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

## APPENDIX D

### MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE WEEKLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
<b>OBSERVE AND RECORD</b>	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

ANNUALLY	
<b>ANALYZE</b>	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH

ANNUALLY	
<b>REPORT</b>	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and averaged annulus pressure(s) (psig)
	Each month's averaged injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

Records of all monitoring activities must be retained and made available for inspection at the following location:

**Westport Oil & Gas Co., LP**  
**1368 South 1200 East**  
**Vernal, Utah, CO 84078**

## APPENDIX E

### PLUGGING AND ABANDONMENT REQUIREMENTS

See diagram.

All cement plugs will be placed with tubing.

9.2 ppg plugging gel or fresh water weighted with bentonite or treated brine will be placed between all plugs. The EPA has modified the Plugging and Abandonment Plan submitted by the permittee. The EPA has added Plug No. 4, 1700 feet to 1900 feet, to protect the Mahogany Bench interval.

**PLUG NO. 1:** This plug was set as part of the conversion to a salt water disposal well. Squeeze Wasatch and Mesaverde perforations gross 5780 feet through 6654 feet. Set a cast iron cement retainer (CICR) approximately 5750 feet. Place two (2) sacks of Class "G" cement on top of CICR.

**PLUG NO. 2:** Cement squeeze gross perforations 4718 feet through 5018 feet. Place CICR approximately 4700 feet. Place two (2) sacks of Class "G" on top of CICR.

**PLUG NO. 3:** Within the 4-1/2 inch casing, place cast iron bridge plug (CIBP) approximately 4193 feet. Place twelve (12) sacks of Class "G" cement on top of CIBP.

**PLUG NO. 4:** Cement squeeze 1700 feet to 1900 feet. (Mahogany Bench at 1816 feet).

**PLUG NO. 5:** Perforate 4-1/2 inch casing at 1105 feet. Squeeze Class "G" cement plug approximately 1005 feet to 1105 feet. Set CICR approximately 1005 feet. Place two (2) sacks of Class "G" cement on top of CICR.

**PLUG NO. 6:** Perforate 4-1/2 casing at 300 feet. Squeeze with a minimum 300 sacks of Class "G" cement circulated to the surface. 4-1/2 inch casing will be cemented with Class "G" cement from 300 feet to the surface.

**NBU 347**  
**NWSW-Sec. 11-T10S-R22E**  
**Underground Injection Control**  
**Permit Application**

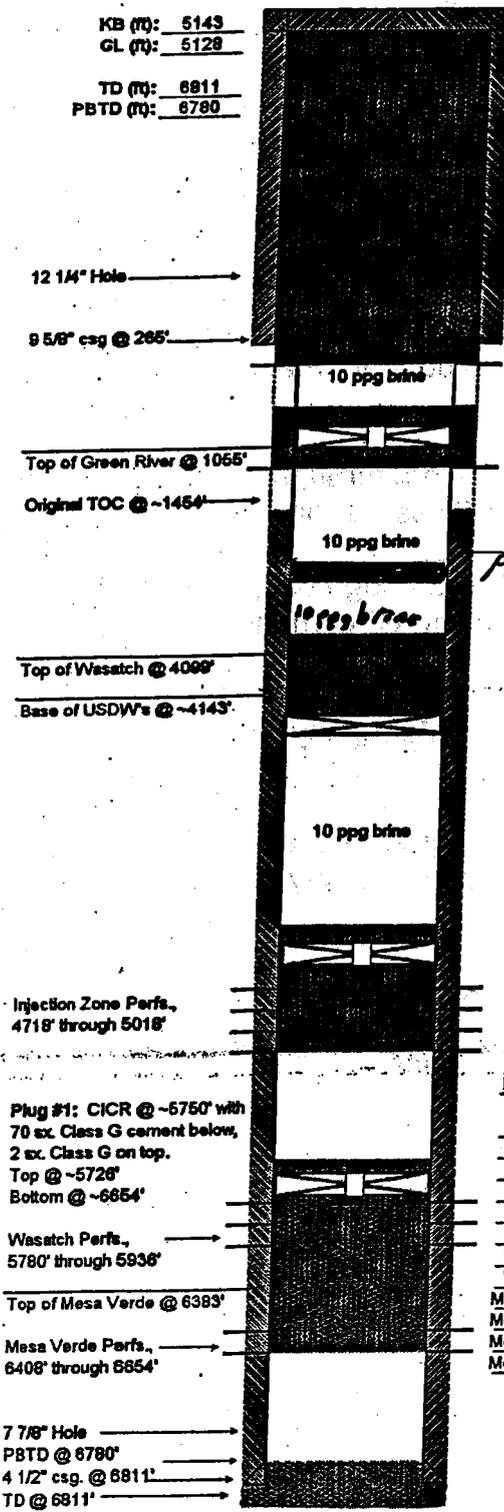
**ATTACHMENT Q3**

**WELL: NBU 347**  
**FIELD: NATURAL BUTTES**  
**API #: 43-047-33709**  
**LEASE #: U-01197-A-6T**  
**EPA PERMIT #:**

**CNTY: UTAH**  
**STATE: UTAH**

**FT.: 1697' FSL, 411' FWL**  
**Q-Q: NWSW**  
**SEC: 11**  
**TWS: 109**  
**RGE: 22E**

**PROPOSED P&A WELLBORE DIAGRAM**



**CASING RECORD**

HOLE (in)	SIZE (in)	WT (lb/ft)	GRADE	TOP (ft)	BTM (ft)
12 1/4	8 5/8	36	K-55	0	265
7 7/8	4 1/2	11.8	K-55	0	6811

**Plug #6:** Perfs. @ ~300' with minimum of 115 cc. Class G cement circulated (94 cc. in annulus, 23 cc. in 4.5")  
**Top @ Surface**  
**Bottom @ ~300'**

**Plug #5:** Perfs. @ 1105', CICR @ ~1005' with 30 cc. Class G cement below.  
**Top @ ~1005'**  
**Bottom @ ~1105'**

*PLUG 4: 1708' - 1900' : Mahogany Beach 18 1/2"*

**Plug #3:** CIBP @ ~4193' with 12 cc. Class G cement on top.  
**Top @ ~4049'**  
**Bottom @ ~4193'**

**Plug #2:** CICR @ ~4700' with 25 cc. Class G cement below, 2 cc. Class G on top.  
**Top @ ~4676'**  
**Bottom @ ~5018'**

**PERFORATION RECORD**

ZONE	TOP (ft)	BTM (ft)	SPF	DATE SHOT	STATUS
Wasatch	4718	4749	4	NEW	PROPOSED
Wasatch	4763	4780	4	NEW	PROPOSED
Wasatch	4795	4814	4	NEW	PROPOSED
Wasatch	4883	4922	4	NEW	PROPOSED
Wasatch	4988	5018	4	NEW	PROPOSED
Wasatch	5780	5876	4	5/7/02	SOZD.
Wasatch	5930	5936	4	5/7/02	SOZD.
Mesa Verde	6408	6414	4	5/7/02	SOZD.
Mesa Verde	6430	6436	4	5/7/02	SOZD.
Mesa Verde	6604	6610	4	5/3/02	SOZD.
Mesa Verde	6648	6654	4	5/3/02	SOZD.

## APPENDIX F

### CORRECTIVE ACTION REQUIREMENTS

Prior to authorization to inject into the NBU No. 347 SWD, the permittee shall cement squeeze perforations 4761-4762 feet in the NBU No. 31, and demonstrate to the EPA, via Ground Water Section Guidance 37-Part II External Mechanical Integrity, that an 80% bond index annulus cement bond exists across the squeezed perforations.

# STATEMENT OF BASIS

**WESTPORT OIL AND GAS COMPANY, L.P.  
NBU 347 SWD  
UINTAH COUNTY, UT**

**EPA PERMIT NO. UT20973-06399**

**CONTACT:** Emmett Schmitz  
U. S. Environmental Protection Agency  
Ground Water Program, 8P-W-GW  
999 18th Street, Suite 300  
Denver, Colorado 80202-2466  
Telephone: 1-800-227-8917 ext. 6174

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

UIC Permits specify the conditions and requirements for construction, operation, monitoring and reporting, and plugging of injection wells to prevent the movement of fluids into underground sources of drinking water (USDWs). Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

Upon the Effective Date when issued, the Permit authorizes the construction and operation of a "new" injection well or wells governed by the conditions specified in the Permit. The Permit is issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR 144.39, 144.40 and 144.41. The Permit is subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR 144.36(a).

## PART I. General Information and Description of Facility

Westport Oil and Gas Company, L.P.  
1670 Broadway  
Suite 2800  
Denver, CO 80202-4801

on

April 7, 2004

submitted an application for an Underground Injection Control (UIC) Program Permit for the following injection well or wells:

The Natural Buttes Unit No. 347 (NBU 347) is currently an inactive Wasatch and Mesaverde Formations natural gas well. The permittee intends to convert the NBU 347 to a Wasatch Formation salt water disposal well, i.e., the Natural Buttes Unit No. 347 SWD (NBU 347 SWD). As detailed in Appendix D (Well Construction Requirements) the permittee will cement squeeze current open perforations in the Wasatch and Mesaverde Formations and will construct injection perforations in a stratigraphically higher interval in the Wasatch Formation.

NBU 347 SWD  
1697 FSL, 411 FEL, NWSW S11, T10S, R22E  
Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The Permit application, including the required information and data necessary to issue a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed by EPA and determined to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

TABLE 1.1 WELL STATUS / DATE OF OPERATION		
NEW WELLS		
Well Name	Well Status	Date of Operation
NBU 347 SWD	New	N/A

## PART II. Permit Considerations (40 CFR 146.24)

### Geologic Setting (TABLE 2.1)

TABLE 2.1 GEOLOGIC SETTING NBU 347 SWD				
Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta	0.00	1,055.00	< 10,000.00	22,740.00 Calcareous shale, some limestone, claystone, siltstone and sandstone. Fluvial deposits on east and west ends of basin. Lacustrine in center.
Green River	1,055.00	4,033.00	< 10,000.00	Mostly lacustrine shale with fluvial and lacustrine sand, limestone and marlstone.
Wasatch	4,099.00	6,383.00	-10,000.00 - 22,704.00	Mainly lacustrine shale, sandstone and conglomerate. Interfingers with overlying and underlying formations.
Top Confining Zone	4,494.00	4,718.00		Shale
Gross perforated interval	4,718.00	5,018.00	22,704.00	In the area of the NBU No. 347, the lithology is primarily continental fluvial-alluvial point bars, channel sands, and alluvial overbank sand. All lithologies are interbedded.
Mesaverde	6,383.00	6,811.00		Continental sand and shale. Depth to bottom of Mesaverde is greater than 6811 feet.

### Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by the confining zone which is free of known open faults or fractures within the Area of Review.

**TABLE 2.2  
INJECTION ZONES  
NBU 347 SWD**

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Wasatch	4,718.00	5,018.00	22,704.00	0.780	8.00%	N/A

\* C - Currently Exempted  
E - Previously Exempted  
P - Proposed Exemption  
N/A - Not Applicable

**Confining Zone(s) (TABLE 2.3)**

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

**TABLE 2.3  
CONFINING ZONES  
NBU 347 SWD**

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Wasatch	Tight calcareous siltstone, mudstone and shale. The confining sediments are impermeable.	4,494.00	4,718.00
Wasatch	Silty shale	5,123.00	5,174.00

**Underground Sources of Drinking Water (USDWs) (TABLE 2.4)**

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

**TABLE 2.4  
UNDERGROUND SOURCES OF DRINKING WATER (USDW)  
NBU 347 SWD**

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uintah, Green River and Wasatch	The gross USDW interval is composed of alluvial, fluvial and restricted lacustrine permeable to impermeable sands, impermeable argillaceous siltstone, vari-colored shale, mudstone and carbonates.	0.00	4,143.00	1,000.00 - 10,000.00

## PART III. Well Construction (40 CFR 146.22)

**TABLE 3.1  
WELL CONSTRUCTION REQUIREMENTS  
NBU 347 SWD**

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Longstring	7.88	4.50	0.00 - 6,811.00	1,454.00 - 6,780.00
Surface	12.25	9.63	0.00 - 265.00	0.00 - 265.00

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

The permittee will cement squeeze former natural gas production gross perforations, Wasatch Formation 5780 - 5936, and Mesaverde Formation 6408 feet to 6654 feet. The permittee will construct new injection perforations in the Wasatch Formation from 4718 feet to 5018 feet (gross).

### **Casing and Cementing (TABLE 3.1)**

The well construction plan was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction details for this "new" injection well is shown in TABLE 3.1.

Remedial cementing may be required if the casing cement is shown to be inadequate by cement bond log or other demonstration of Part II (External) mechanical integrity.

An EPA analysis of the Cement Bond Log (CBL) of the NBU 347 delineates 80% cement bond index annulus cement from 3980 feet to 5506 feet; an interval that extends from 163 feet above the base of the USDW (4143 feet, across the confining interval 4494 feet to 4718 feet, to 488 feet below the base (5018 feet) of the proposed injection interval. This annulus cement bond appears adequate to preclude vertical migration of injectate outside of the authorized gross injection interval 4718 feet through 5018 feet. No remedial cementing is required prior to receiving authorization to inject.

### **Tubing and Packer**

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

### **Tubing-Casing Annulus (TCA)**

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a corrosion inhibitor or other fluid approved by the Director.

The tubing/casing annulus must be kept closed at all times so that it can be monitored as required

under the conditions of the Permit.

### Monitoring Devices

The permittee will be required to install and maintain wellhead equipment allowing for monitoring pressures and providing access for sampling the injected fluid. This equipment includes: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) pressure gauges attached to the injection tubing and the TCA to monitor the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

## PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

**TABLE 4.1  
AOR AND CORRECTIVE ACTION**

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
NBU No. 31	Producer	No	7,000.00	2,146.00	Yes

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

On a weekly basis, the permittee shall inspect the surface area of the NBU 31 for any surface expression of injectate fluid. Should such contamination be observed, the permittee shall shut-in the NBU 347 immediately and inform the EPA ; conduct remedial work on the NBU 347; and submit to the EPA the EPA WELL REWORK RECORD. No injection shall commence until the permittee receives written authorization from the Director.

Prior to receiving authorization to inject into the NBU 347 SWD, the permittee shall cement squeeze perforations 4761 feet - 4762 feet in the NBU 31, and demonstrate to the EPA, via Ground Water Section Guidance 37 - Part II External Mechanical Integrity Test, that an 80% bond index annulus cement bond exists across the squeezed perforations.

### Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

### Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

## PART V. Well Operation Requirements (40 CFR 146.23)

**TABLE 5.1  
INJECTION ZONE PRESSURES  
NBU 347 SWD**

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Wasatch	4,718.00	0.780	1,625

### Approved Injection Fluid

The approved injection fluid is limited to fluids which meet requirements pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are not approved.

### Injection Pressure Limitation

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit,

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

- FP = formation fracture pressure (measured at surface)
- fg = fracture gradient (from submitted data or tests)
- sg = specific gravity (of injected fluid)
- d = depth to top of injection zone (or top perforation)

### **Injection Volume Limitation**

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

Because the injection zone (4718 feet - 5018 feet) has a Total Dissolved Solids (TDS) in excess of 10,000 mg/l it is not considered an Underground Source of Drinking Water (USDW). For that reason there is no limitation on the amount of authorized fluid that can be injected. There is also no limit on the injection rate as long as the Maximum Allowable Injection Pressure (MAIP) is not exceeded.

### **Mechanical Integrity (40 CFR 146.8)**

An injection well has mechanical integrity if:

1. there is no significant leak in the casing, tubing, or packer (Part I); and
2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependant upon well-specific conditions as explained below:

Well construction and site-specific conditions dictate the following requirements for Mechanical Integrity (MI) demonstrations:

Part I MI - Internal MI will be demonstrated prior to beginning injection. Since this well is constructed with a standard casing, tubing, and packer configuration, a successful mechanical integrity test (MIT) is required to take place at least once every five (5) years. A demonstration of Part I MI is also required prior to resuming injection following any workover operation that affects the casing, tubing, or packer. Part I MI may be demonstrated by a standard tubing-casing annulus pressure test using the maximum permitted injection pressure or 1000 psi, whichever is less, with ten percent or less pressure loss over thirty minutes.

Part II MI - Cement records for this well show that adequate cement was placed in the well. The CBL confirms that this cement meets or exceeds minimum requirements needed to demonstrate zone isolation (at least 15 feet of continuous 80% bond, or better) through the confining zone. The CBL for this well shows 1626 feet of 80% or greater bond through the interval 3980 feet to 5506 feet. Therefore, further testing for Part II MI will not be required.

## **PART VI. Monitoring, Recordkeeping and Reporting Requirements**

### **Injection Well Monitoring Program**

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, injection flow rate and cumulative fluid volume, and the maximum and average value for each must be determined for each month. This information is required to be reported annually as part of the Annual Report to the Director.

## **PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)**

### **Plugging and Abandonment Plan**

Prior to abandonment, the well or wells must be plugged with cement in a manner which will not allow the movement of fluids either into or between USDWs. The plugging and abandonment plan is described in Appendix E of the Permit.

## **PART VIII. Financial Responsibility (40 CFR 144.52)**

### **Demonstration of Financial Responsibility**

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Surety Bond, received April 20, 2004
--------------------------------------

Evidence of continuing financial responsibility is required to be submitted to the Director annually.

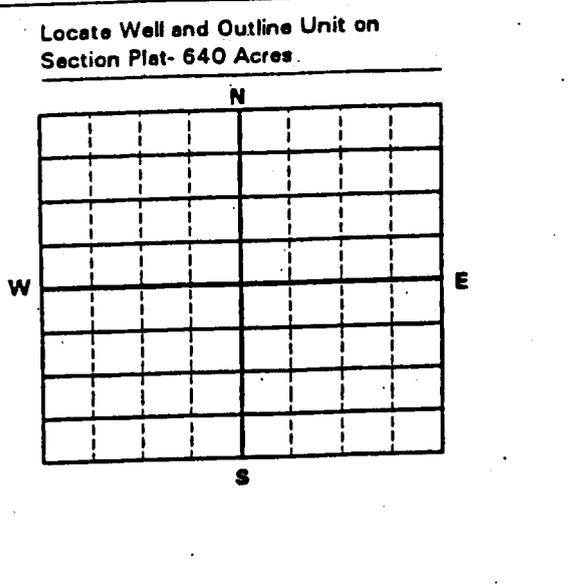
United States Environmental Protection Agency  
Washington, DC 20460



# Application To Transfer Permit

Name and Address of Existing Permittee	Name and Address of Surface Owner
--	-----------------------------------

State	County	Permit Number
Surface Location Description 1/4 of 1/4 of 1/4 of 1/4 of Section ___ Township ___ Range ___		
Locate well in two directions from nearest lines of quarter section and drilling unit		
Surface Location ___ ft. from (N/S) ___ Line of quarter section and ___ ft. from (E/W) ___ Line of quarter section.		
Well Activity	Well Status	Type of Permit
<input type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage <input type="checkbox"/> Class III <input type="checkbox"/> Other	<input type="checkbox"/> Operating <input type="checkbox"/> Modification/Conversion <input type="checkbox"/> Proposed	<input type="checkbox"/> Individual <input type="checkbox"/> Area Number of Wells ___
Lease Number	Well Number	



Name(s) and Address(es) of New Owners(s)	Name and Address of New Operator
--	----------------------------------

*Attach to this application a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them.*

*The new permittee must show evidence of financial responsibility by the submission of a surety bond, or other adequate assurance, such as financial statements or other materials acceptable to the Director.*

## Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)	Signature	Date Signed
--	-----------	-------------



**COMPLETION REPORT FOR BRINE DISPOSAL,  
HYDROCARBON STORAGE, OR ENHANCED RECOVERY WELL**

Approval Expires 6-30-98

NAME AND ADDRESS OF EXISTING PERMITTEE	NAME AND ADDRESS OF SURFACE OWNER
--	-----------------------------------

<p>LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES</p> <div style="text-align: center;"> <p>N</p> <table border="1" style="width: 100%; height: 100px; border-collapse: collapse;"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table> <p style="text-align: center;">S</p> <p style="position: absolute; left: -40px; top: 50%; transform: translateY(-50%);">W</p> <p style="position: absolute; right: -40px; top: 50%; transform: translateY(-50%);">E</p> </div>																																																																																	STATE	COUNTY	PERMIT NUMBER
SURFACE LOCATION DESCRIPTION ____ 1/4 of ____ 1/4 of ____ 1/4 of ____ 1/4 of Section ____ Township ____ Range ____																																																																																			
LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT  Surface Location ____ ft. from (N/S) ____ Line of quarter section and ____ ft. from (E/W) ____ Line of quarter section																																																																																			
<b>WELL ACTIVITY</b> <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage		<b>TYPE OF PERMIT</b> <input type="checkbox"/> Individual <input type="checkbox"/> Area Number of Wells ____																																																																																	
Anticipated Daily Injection Volume (Bbls) Average _____ Maximum _____		Injection Interval Feet _____ to _____ Feet																																																																																	
Anticipated Daily Injection Pressure (PSI) Average _____ Maximum _____		Depth to Bottom of Lowermost Freshwater Formation (Feet)																																																																																	

Type of Injection Fluid (Check the appropriate block(s)) <input type="checkbox"/> Salt Water <input type="checkbox"/> Brackish Water <input type="checkbox"/> Fresh Water <input type="checkbox"/> Liquid Hydrocarbon <input type="checkbox"/> Other	Lease Name _____ Well Number _____	
Name of Injection Zone _____		

Date Drilling Began _____	Date Well Completed _____	Permeability of Injection Zone _____
---------------------------	---------------------------	--------------------------------------

Date Drilling Completed _____	Porosity of Injection Zone _____
-------------------------------	----------------------------------

CASING AND TUBING			CEMENT		HOLE	
OD Size	Wt/Ft — Grade — New or Used	Depth	Sacks	Class	Depth	Bit Diameter

INJECTION ZONE STIMULATION		WIRE LINE LOGS, LIST EACH TYPE	
Interval Treated	Materials and Amount Used	Log Type	Logged Intervals

Complete Attachments A — E listed on the reverse.

**CERTIFICATION**

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).*

NAME AND OFFICIAL TITLE (Please type or print)	DATE SIGNED
--	-------------







**PLUGGING RECORD**

NAME AND ADDRESS OF PERMITTEE

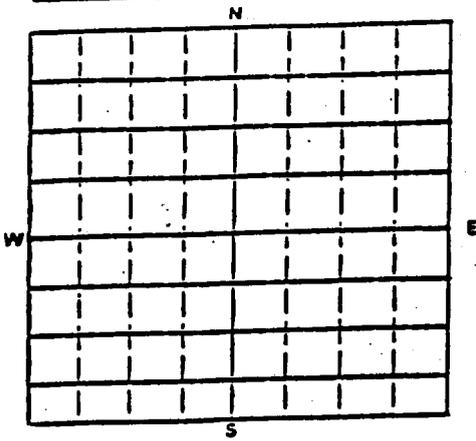
NAME AND ADDRESS OF CEMENTING COMPANY

STATE

COUNTY

PERMIT NUMBER

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT - 640 ACRES



SURFACE LOCATION DESCRIPTION

1/4 OF

1/4 OF

1/4 SECTION

TOWNSHIP

RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location \_\_\_\_\_ ft. from (N/S) \_\_\_\_\_ Line of quarter section

and \_\_\_\_\_ ft. from (E/W) \_\_\_\_\_ Line of quarter section

TYPE OF AUTHORIZATION

- Individual Permit
- Area Permit
- Rule

Number of Wells \_\_\_\_\_

Lease Name

Describe in detail the manner in which the fluid was placed & the method used in intruding it into the hole

**CASING AND TUBING RECORD AFTER PLUGGING**

SIZE	WT(LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE

WELL ACTIVITY

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- CLASS I
- CLASS II
  - Brine Disposal
  - Enhanced Recovery
  - Hydrocarbon Storage
- CLASS III

- The Balance Method
- The Dump Barrel Method
- The Two-Plug Method
- Other

**CEMENTING TO PLUG AND ABANDON DATA:**

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)							
Depth to Bottom of Tubing or Drill Pipe (ft.)							
Sacks of Cement To Be Used (each plug)							
Slurry Volume To Be Pumped (cu. ft.)							
Calculated Top of Plug (ft.)							
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)							
Type Cement or Other Material (Class III)							

**LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS**

From	To	From	To

Signature of Cementer or Authorized Representative

Signature of EPA Representative

**CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (REF. 40 CFR 122.22)

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED

SUBJECT: GROUND WATER SECTION GUIDANCE NO. 35  
Procedures to follow when excessive annular pressure is  
observed on a well.

FROM: Tom Pike, Chief  
UIC Direct Implementation Section

TO: All Section Staff  
Montana Operations Office

The following procedure is intended as an aid to UIC field inspectors when they encounter excessive annular pressure on a well. Excessive annular pressure is defined as 100 psi or 10% of the tubing pressure, whichever is less.

Usually, annular pressure is a direct indication of a loss of mechanical integrity. In some instances, recurring annular pressure may be caused by fluctuations in the temperature of the injected fluid. These temperature fluctuations may cause the annular pressure to increase when a hot fluid is being injected and decrease as the temperature of the injected fluid cools. The presence of temperature-induced pressure on the annulus does not indicate a malfunction in the casing/tubing/packer system and is not considered a loss of mechanical integrity. Wells exhibiting recurring temperature-induced annular pressure may be allowed to continue injecting if a temperature monitoring program is approved and followed.

This guidance was written to help determine the cause of annular pressure. When the procedures in this guidance are followed, any major mechanical integrity problems (a breach in the casing/tubing/packer system) will become apparent quickly. A quick determination will allow the operator to begin follow-up procedures immediately to prevent contamination to USDWs.

Use Section Guidance No. 35 to determine if the well has experienced a loss of mechanical integrity. If you find that there is a loss of mechanical integrity, use *Headquarters Guidance No. 76. - Follow-up to loss of Mechanical Integrity for Class II Wells* to bring the well back into compliance. The use of Section Guidance No. 35 is not to be confused with, nor does it supersede any provision of *Headquarters Guidance No. 76*. Instead, the two guidance documents are meant to work together to identify and to remedy any potential mechanical integrity failure.

A flowchart for Section Guidance No. 35 is included for quick reference in the field.

PROCEDURES TO FOLLOW WHEN EXCESSIVE ANNULAR PRESSURE IS OBSERVED

During field inspections, the following procedures should be followed when excessive annular pressure is observed. Excessive annular pressure is defined as 100 psi or 10% of the tubing pressure, whichever is less.

NOTE CONDITIONS AT THE WELL

Note tubing and annular pressure readings, and the operating status of the well (injecting, shut-in, etc.) on the UIC inspection form.

SEE IF ANNULUS PRESSURE WILL BLEED-OFF

Attempt to bleed the pressure from the annulus by having the operator open the annulus (for a maximum of sixty seconds).

It is the operator's responsibility to collect and dispose of any fluids bled from the annulus.

DID THE ANNULAR PRESSURE BLEED TO 0 PSI WITHIN SIXTY SECONDS?

YES

NO

Have the operator close the annulus.

Have the operator close the annulus.

On your inspection form note the volume of fluid (or gas) bled from the annulus during the sixty seconds, and the tubing and annulus pressures.

On your inspection form note the volume of fluid (or gas) bled from the annulus during the sixty seconds, and the tubing and annulus pressures.

Have the operator shut the well in for 2 hours, and if possible, bleed pressure from the injection tubing. Record the tubing and annulus pressure after two hours.

Bleed off the annulus for 60 seconds. Record the tubing and annulus pressures after bleed-off, and estimate the volume bled off.

INFORM THE OPERATOR THAT THE WELL HAS AN APPARENT MECHANICAL INTEGRITY FAILURE and provide the operator with the guidance that discusses OPERATOR RESPONSIBILITIES FOLLOWING MECHANICAL INTEGRITY FAILURES.

**END PROCEDURE.**

SEE IF PRESSURE RETURNS WITHIN 15 MINUTES

Continue to monitor the well for annulus pressure return for at least 15 minutes after the annulus valve is closed.

DOES PRESSURE  
RETURN TO THE  
ANNULUS AFTER 15  
MINUTES?

YES

On your inspection form, note the annulus and tubing pressures recorded after 15 minutes.

Have the operator shut the well in for 2 hours, and if possible, bleed pressure from the injection tubing. Record the tubing and annulus pressure after two hours.

Bleed off the annulus for 60 seconds. Record the tubing and annulus pressures after bleed-off, and estimate the volume bled off.

INFORM THE OPERATOR THAT THE WELL HAS AN APPARENT MECHANICAL INTEGRITY FAILURE and provide the operator with the guidance that discusses OPERATOR RESPONSIBILITIES FOLLOWING MECHANICAL INTEGRITY FAILURES.

END PROCEDURE.

NO

Require the operator to monitor and report to EPA with the annulus and tubing pressures for at least 14 days to see if pressure returns to the annulus.

Instruct the operator to contact EPA as soon as any pressure returns to the annulus.

DOES PRESSURE  
RETURN TO THE  
ANNULUS WITHIN  
14 DAYS?

YES

EPA Technical Expert will design a proper Mechanical Integrity test.

Compliance officer will require the operator to conduct the test within 14 days.

NO

The well is considered to have mechanical integrity.

END PROCEDURE.

DOES THE WELL  
PASS THE MIT?

YES

Require the operator to monitor and report to EPA with the annulus and tubing pressures for at least 14 days to see if pressure returns to the annulus.

Instruct the operator to contact EPA as soon as any pressure returns to the annulus.

NO

INFORM THE OPERATOR THAT THE WELL HAS AN APPARENT MECHANICAL INTEGRITY FAILURE and provide the operator with the guidance that discusses OPERATOR RESPONSIBILITIES FOLLOWING MECHANICAL INTEGRITY FAILURES.

END PROCEDURE.

DOES PRESSURE  
RETURN TO THE  
ANNULUS WITHIN  
14 DAYS?

YES

NO

EPA Technical Expert will design a proper Monitoring Program to determine the cause of recurrent annular pressure.

The well is considered to have mechanical integrity.

END PROCEDURE.

Compliance officer will require the operator to begin the Monitoring program within 14 days.

Conduct unannounced inspections at the well during the Monitoring Program.

IS THE ANNULUS  
PRESSURE CAUSED  
BY TEMPERATURE?

YES

NO

EPA Technical Expert will design a proper Temperature Monitoring Program that allows injection to continue while tracking relationship between temperature and recurrent annulus pressure.

INFORM THE OPERATOR THAT THE WELL HAS AN APPARENT MECHANICAL INTEGRITY FAILURE and provide the operator with the guidance that discusses OPERATOR RESPONSIBILITIES FOLLOWING MECHANICAL INTEGRITY FAILURES.

Compliance officer will require the operator to cease injection immediately if the operator fails to follow the Temperature Monitoring Program.

END PROCEDURE.

Compliance officer will require the operator to cease injection immediately if recurrent annular pressures cannot be explained by the results of the Temperature Monitoring Program.

Compliance officer will require annual Mechanical Integrity Tests using the standard pressure method.

# 14-DAY PRESSURE MONITORING

Please use this form to report data for a 14-day period after pressure is bled from the tubing-casing annulus. Please telephone EPA in Denver as soon as possible when/if pressure returns to the annulus. This data will be used to determine the cause(s) of recurrent annular pressure.

**NOTE:** DO NOT BLEED PRESSURE FROM ANNULUS DURING THE 14-DAY MONITORING PERIOD.

	DATE	TIME	ANNULUS PRESSURE (psi)	TUBING PRESSURE (psi)	WELL INJECTING (YES/NO)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

WELL NAME: \_\_\_\_\_

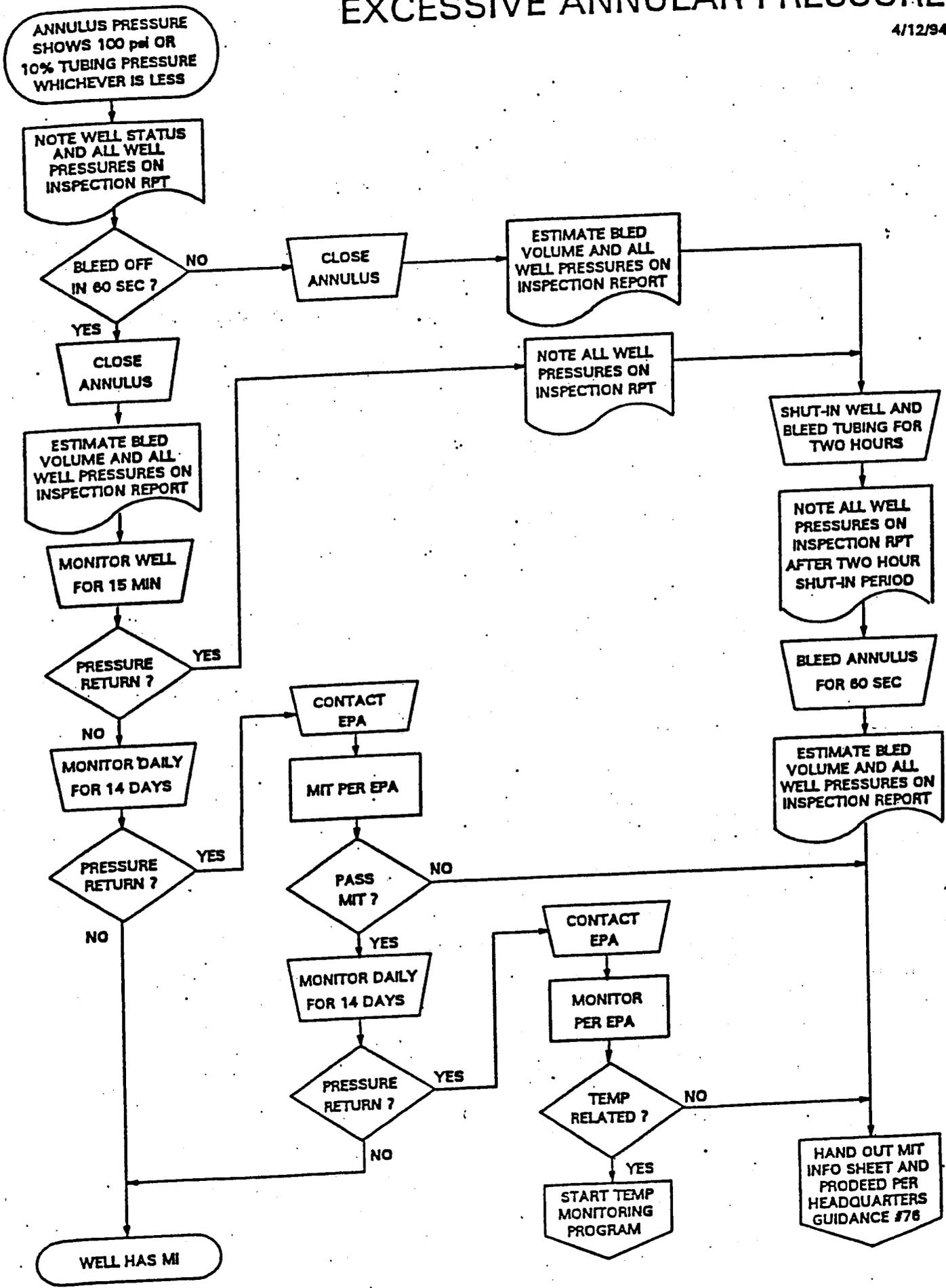
ATOR: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

# EXCESSIVE ANNULAR PRESSURE

4/12/94





## OPERATOR RESPONSIBILITIES FOLLOWING MECHANICAL INTEGRITY FAILURES

- 1) IMMEDIATELY - Cease injection and shut-in the well as rapidly as feasible. In no case shall the well remain in operation beyond 48 hours unless Tom Pike, Chief, Underground Injection Control Implementation (UIC-I) Section [(303) 293-1544] allows for temporary operation of the well.
- 2) WITHIN 24 HOURS - Verbally notify the UIC-I Section Chief of MIT failure even in cases where the failure is detected during a test which was witnessed by a UIC inspector.
- 3) WITHIN 5 DAYS - Submit a written follow-up report documenting test results, remediation taken or a proposed remediation plan and any limits established by the Director on appropriate volume or time for continued injection operation.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

SUBJECT: GROUND WATER SECTION GUIDANCE NO. 39  
Pressure testing injection wells for Part I (internal)  
Mechanical Integrity

FROM: Tom Pike, Chief  
UIC Direct Implementation Section

TO: All Section Staff  
Montana Operations Office

Introduction

The Underground Injection Control (UIC) regulations require that an injection well have mechanical integrity at all times (40 CFR 144.28 (f) (2) and 40 CFR 144.51 (q) (1)). A well has mechanical integrity (40 CFR 146.8) if:

- (1) There is no significant leak in the tubing, casing or packer; and
- (2) There is no significant fluid movement into an underground source of drinking water (USDW) through vertical channels adjacent to the injection wellbore.

Definition: Mechanical Integrity Pressure Test for Part I. A pressure test used to determine the integrity of all the downhole components of an injection well, usually tubing, casing and packer. It is also used to test tubing cemented in the hole by using a tubing plug or retrievable packer. Pressure tests must be run at least once every five years. If for any reason the tubing/packer is pulled, the injection well is required to pass another mechanical integrity test of the tubing casing and packer prior to recommencing injection regardless of when the last test was conducted. Tests run by operators in the absence of an EPA inspector must be conducted according to these procedures and recorded on either the attached form or an equivalent form containing the necessary information. A pressure recording chart documenting the actual annulus test pressures must be attached to the form.

This guidance addresses making a determination of Part I of Mechanical Integrity (no leaks in the tubing, casing or packer). The Region's policy is: 1) to determine if there are significant leaks in the tubing, casing or packer; 2) to assure that the casing can withstand pressure similar to that which



would be applied if the tubing or packer fails; 3) to make the Region's test procedure consistent with the procedures utilized by other Region VIII Primacy programs; and 4) to provide a procedure which can be easily administered and is applicable to all class I and II wells. Although there are several methods allowed for determining mechanical integrity, the principal method involves running a pressure test of the tubing/casing annulus. Region VIII's procedure for running a pressure test is intended to aid UIC field inspectors who witness pressure tests for the purpose of demonstrating that a well has Part I of Mechanical Integrity. The guidance is also intended as a means of informing operators of the procedures required for conducting the test in the absence of an EPA inspector.

### Pressure Test Description

#### Test Frequency

The mechanical integrity of an injection well must be maintained at all times. Mechanical integrity pressure tests are required at least every five (5) years. If for any reason the tubing/packer is pulled, however, the injection well is required to pass another mechanical integrity test prior to recommencing injection regardless of when the last test was conducted. The Regional UIC program must be notified of the workover and the proposed date of the pressure test. The well's test cycle would then start from the date of the new test if the well passes the test and documentation is adequate. Tests may be required on a more frequent basis depending on the nature of the injectate and the construction of the well (see Section guidance on MITs for wells with cemented tubing and regulations for Class I wells).

Region VIII's criteria for well testing frequency is as follows:

1. Class I hazardous waste injection wells; initially [40 CFR 146.68(d)(1)] and annually thereafter;
2. Class I non-hazardous waste injection wells; initially and every two (2) years thereafter, except for old permits (such as the disposal wells at carbon dioxide extraction plants which require a test at least every five years);
3. Class II wells with tubing, casing and packer; initially and at least every five (5) years thereafter;
4. Class II wells with tubing cemented in the hole; initially and every one (1) or two (2) years thereafter



depending on well specific conditions (See Region VIII UIC Section Guidance #36);

5. Class II wells which have been temporarily abandoned (TAd) must be pressure tested after being shut-in for two years; and
6. Class III uranium extraction wells; initially.

### Test Pressure

To assure that the test pressure will detect significant leaks and that the casing is subjected to pressure similar to that which would be applied if the tubing or packer fails, the tubing/casing annulus should be tested at a pressure equal to the maximum allowed injection pressure or 1000 psig whichever is less. The annular test pressure must, however, have a difference of at least 200 psig either greater or less than the injection tubing pressure. Wells which inject at pressures of less than 300 psig must test at a minimum pressure of 300 psig, and the pressure difference between the annulus and the injection tubing must be at least 200 psi.

### Test Criteria

1. The duration of the pressure test is 30 minutes.
2. Both the annulus and tubing pressures should be monitored and recorded every five (5) minutes.
3. If there is a pressure change of 10 percent or more from the initial test pressure during the 30 minute duration, the well has failed to demonstrate mechanical integrity and should be shut-in until it is repaired or plugged.
4. A pressure change of 10 percent or more is considered significant. If there is no significant pressure change in 30 minutes from the time that the pressure source is disconnected from the annulus, the test may be completed as passed.

### Recordkeeping and Reporting

The test results must be recorded on the attached form. The annulus pressure should be recorded at five (5) minute intervals. Tests run by operators in the absence of an EPA inspector must be conducted according to these procedures and recorded on the attached form or an equivalent form and a pressure recording



chart documenting the actual annulus test pressures must be attached to the submittal. The tubing pressure at the beginning and end of each test must be recorded. The volume of the annulus fluid bled back at the surface after the test should be measured and recorded on the form. This can be done by bleeding the annulus pressure off and discharging the associated fluid into a five gallon container. The volume information can be used to verify the approximate location of the packer.

### Procedures for Pressure Test

1. Scheduling the test should be done at least two (2) weeks in advance.
2. Information on the well completion (location of the packer, location of perforations, previous cement work on the casing, size of casing and tubing, etc.) and the results of the previous MIT test should be reviewed by the field inspector in advance of the test. Regional UIC Guidance #35 should also be reviewed. Information relating to the previous MIT and any well workovers should be reviewed and taken into the field for verification purposes.
3. All Class I wells and Class II SWD wells should be shut-in prior to the test. A 12 to 24-hour shut-in is preferable to assure that the temperature of the fluid in the wellbore is stable.
4. Class II enhanced recovery wells may be operating during the test, but it is recommended that the well be shut-in if possible.
5. The operator should fill the casing/tubing annulus with inhibited fluid at least 24 hours in advance, if possible. Filling the annulus should be undertaken through one valve with the second valve open to allow air to escape. After the operator has filled the annulus, a check should be made to assure that the annulus will remain full. If the annulus can not maintain a full column of fluid, the operator should notify the Director and begin a rework. The operator should measure and report the volume of fluid added to the annulus. If not already the case, the casing/tubing valves should be closed, at least, 24 hours prior to the pressure test.

Following steps are at the well:

6. Read tubing pressure and record on the form. If the



well is shut-in, the reported information on the actual maximum operating pressure should be used to determine test pressures.

7. Read pressure on the casing/tubing annulus and record value on the form. If there is pressure on the annulus, it should be bled off prior to the test. If the pressure will not bleed-off, the guidance on well failures (Region VIII UIC Section Guidance #35) should be followed.
8. Ask the operator for the date of the last workover and the volume of fluid added to the annulus prior to this test and record information on the form.
9. Hook-up well to pressure source and apply pressure until test value is reached.
10. Immediately disconnect pressure source and start test time (If there has been a significant drop in pressure during the process of disconnection, the test may have to be restarted). The pressure gages used to monitor injection tubing pressure and annulus pressure should have a pressure range which will allow the test pressure to be near the mid-range of the gage. Additionally, the gage must be of sufficient accuracy and scale to allow an accurate reading of a 10 percent change to be read. For instance, a test pressure of 600 psi should be monitored with a 0 to 1000 psi gage. The scale should be incremented in 20 psi increments.
11. Record tubing and annulus pressure values every five (5) minutes.
12. At the end of the test, record the final tubing pressure.
13. If the test fails, check the valves, bull plugs and casing head close up for possible leaks. The well should be retested.
14. If the second test indicates a well failure, the Region should be informed of the failure within 24 hours by the operator, and the well should be shut-in within 48 hours per Headquarters guidance #76. A follow-up letter should be prepared by the operator which outlines the cause of the MIT failure and proposes a potential course of action. This report should be submitted to EPA within five days.



15. Bleed off well into a bucket, if possible, to obtain a volume estimate. This should be compared to the calculated value obtained using the casing/tubing annulus volume and fluid compressibility values.
16. Return to office and prepare follow-up.

#### Alternative Test Option

While it is expected that the test procedure outlined above will be applicable to most wells, the potential does exist that unique circumstances may exist for a given well that precludes or makes unsafe the application of this test procedure. In the event that these exceptional or extraordinary conditions are encountered, the operator has the option to propose an alternative test or monitoring procedures. The request must be submitted by the operator in writing and must be approved in writing by the UIC-Implementation Section Chief or equivalent level of management.

Attachment



4304733709



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8  
999 18<sup>TH</sup> STREET - SUITE 300  
DENVER, CO 80202-2466  
<http://www.epa.gov/region08>

DEC 29 2004

Ref: 8P-W-GW

RECEIVED  
JAN 03 2005  
DIV. OF OIL, GAS & MINING

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. John T. Conley  
Western Division Manager  
Westport Oil & Gas Company, L.P.  
1670 Broadway - Suite 2800  
Denver, CO 80202

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

REF: UNDERGROUND INJECTION CONTROL (UIC)  
**Authority to Commence Injection**  
**Well Permit No. UT20973-06399**  
**NBU No. 347 SWD**  
NW SW Sec. 11 - T10S - R22E  
Uintah County, Utah

Dear Mr. Conley:

Westport Oil & Gas Company, L.P. (Westport) has satisfactorily fulfilled all the Environmental Protection Agency's (EPA) **Prior to Commencing Injection** requirements in the well specific Permit, UT20973-06399 (Effective October 6, 2004). All Prior to Injection Requirements, i.e., Part I (Internal) Mechanical Integrity Test, Well Rework Record (EPA Form No. 7520-12), a pore pressure, and a Cement Bond Log of a required interval in the NBU No. 31 were reviewed and approved by the EPA.

Westport, as of the date of this letter, is authorized to commence injection into the NBU No. 347 SWD. There will be no limitation on the number of barrels of water that will be injected into the Wasatch Formation interval 4794 feet to 5050 feet. Until such time that the permittee demonstrates through a Step-Rate Injectivity Test that the fracture gradient is other than 0.780 psi/ft, the NBU No. 347 SWD shall be operated at a **maximum allowable injection pressure no greater than 1625 psig.**

As of this approval, responsibility for Permit compliance and enforcement is transferred to the Region VIII UIC Technical Enforcement Program office. Therefore, please direct all future notification, reporting, monitoring and compliance correspondence to the following address, referencing your well name and UIC Permit number on all correspondence regarding this well:

Mr. Nathan Wisner  
Technical Enforcement Program - UIC  
U.S. EPA Region VIII: Mail Code 8ENF-UFO  
999-18th Street - Suite 300  
Denver, CO 80202-2466  
Phone: 303-312-6211, or 1.800.227.8917 (Ext. 6211)

Please be reminded that it is your responsibility to be aware of and to comply with all conditions of Permit UT20973-06399. If you have any questions in regard to the above action, please contact Dan Jackson at 303-312-6155 in the Denver area, or 1.800.227.8917 (Ext. 6155).

Sincerely,

*for*   
Sandra A. Stavnes  
Director  
Ground Water Program

cc: Maxine Natchees  
Chairperson  
Uintah & Ouray Business Committee  
Ute Indian Tribe

Elaine Willie  
Environmental Coordinator  
Ute Indian Tribe

Chester Mills  
Superintendent  
Bureau of Indian Affairs  
Uintah & Ouray Indian Agency

Carroll Estes  
Principal Environmental Specialist  
Westport Oil & Gas Company, L.P.  
Vernal, UT 84078

Gil Hunt  
Technical Services Manager  
State of Utah - Natural Resources

Ed Forsman  
Senior Petroleum Engineer  
Bureau of Land Management  
Vernal District

Nathan Wiser, 8ENF-UFO

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

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b></p> <p>Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.                  Use APPLICATION FOR PERMIT – for such proposals</p>		6. Lease Designation and Serial Number U-01197-A-ST
		7. Indian Allottee or Tribe Name
1. Type of Well		8. Unit or Communitization Agreement NATURAL BUTTES
<input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify) <u>WF</u>		9. Well Name and Number NBU 347
2. Name of Operator WESTPORT OIL & GAS COMPANY, L.P.		10. API Well Number 43-047-33709
3. Address of Operator 1368 SOUTH 1200 EAST, VERNAL, UTAH 84078	4. Telephone Number 435-781-7060	11. Field and Pool, or Wildcat NATURAL BUTTES
5. Location of Well		
Footage : 1697' FSL 411' FWL		County : UINTAH
QQ, Sec, T., R., M : NWSW SEC 11-T10S-R22E		State : UTAH

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

<p align="center"><b>NOTICE OF INTENT</b> (Submit in Duplicate)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Abandonment</td> <td><input type="checkbox"/> New Construction</td> </tr> <tr> <td><input type="checkbox"/> Casing Repair</td> <td><input type="checkbox"/> Pull or Alter Casing</td> </tr> <tr> <td><input type="checkbox"/> Change of Plans</td> <td><input type="checkbox"/> Recompletion</td> </tr> <tr> <td><input type="checkbox"/> Conversion to Injection</td> <td><input type="checkbox"/> Shoot or Acidize</td> </tr> <tr> <td><input type="checkbox"/> Fracture Treat</td> <td><input type="checkbox"/> Vent or Flare</td> </tr> <tr> <td><input type="checkbox"/> Multiple Completion</td> <td><input type="checkbox"/> Water Shut-Off</td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td></td> </tr> </table> <p>Approximate Date Work Will Start _____</p>	<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Recompletion	<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Shoot or Acidize	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____		<p align="center"><b>SUBSEQUENT REPORT</b> (Submit Original Form Only)</p> <table style="width:100%;"> <tr> <td><input type="checkbox"/> Abandonment *</td> <td><input type="checkbox"/> New Construction</td> </tr> <tr> <td><input type="checkbox"/> Casing Repair</td> <td><input type="checkbox"/> Pull or Alter Casing</td> </tr> <tr> <td><input type="checkbox"/> Change of Plans</td> <td><input checked="" type="checkbox"/> Shoot or Acidize</td> </tr> <tr> <td><input type="checkbox"/> Conversion to Injection</td> <td><input type="checkbox"/> Vent or Flare</td> </tr> <tr> <td><input type="checkbox"/> Fracture Treat</td> <td><input type="checkbox"/> Water Shut-Off</td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td></td> </tr> </table> <p>Date of Work Completion <u>8/11/05</u></p> <p><small>Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.                  * Must be accompanied by a cement verification report.</small></p>	<input type="checkbox"/> Abandonment *	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input type="checkbox"/> Change of Plans	<input checked="" type="checkbox"/> Shoot or Acidize	<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____	
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13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

PUMP 1250 GALLONS OF 15% HCL ACID DOWN TBG AND FLUSH WITH DISPOSAL WATER

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

Name & Signature DEBRA DOMENICI *Debra Domenici* Title ASSOC. ENVIRO. ANALYST Date 08/16/05

(State Use Only)

**RECEIVED**  
**AUG 19 2005**

DIV. OF OIL, GAS & MINING

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

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b></p> <p>Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.                  Use APPLICATION FOR PERMIT -- for such proposals</p>		6. Lease Designation and Serial Number <b>U-01197-A-ST</b>
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OPERATOR HAS COMPLETED CONVERTING THE ABOVE WELL TO A CLASS II WATER INJECTION WELL. SEE THE ATTACHED CHRONOLOGICAL HISTORY FOR DETAILS OF THE CONVERSION.

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

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

Name & Signature DEBRA DOMENICI *Debra Domenici* Title ASSOC. ENV. ANALYST Date 08/30/05

(State Use Only)

**RECEIVED  
 SEP 06 2005**



**PERF MESA VERDE FROM 6648'-6654', 4 SPF, 24 HOLES & 6604'-6610', 4 SPF, 24 HOLES. BRK DN PERFS W/2700# @ ½ BPM. ISIP: 1700#, FG: 0.70.**

**5/6/02 RIG ON STAND BY. WILL FRAC 5/6/02.**

**5/7/02 PREP TO DO CBP'S**

**STAGE 1: BRK DN MESA VERDE PERFS 6604'-54' W/2700# @ ½ BPM. ISIP: 1700#, FG: 0.70. FRAC W/878 BBLs YF115ST LIQ GEL & 91,000# 20/40 SD. ISIP: 2568#, FG: 0.82, NET PRESS INCR: 868#, MTP: 4193#, ATP: 3210#, MTR: 37.9 BPM, ATR: 33.1 BPM. PU & RIH W/CBP & PERF GUN. SET CBP @ 6550'.**

**STAGE 2: PERF MESA VERDE 6430'-6436', 4 SPF, 24 HOLES & 6408'-6414', 4 SPF, 24 HOLES. BRK DN PERFS W/2184# @ 1 ½ BPM. ISIP: 1511#, FG: 0.67. FRAC W/1382 BBLs YF115ST LIQ GEL & 150,500# 20/40 SD. ISIP: 2225#, FG: 0.78, NET PRESS INCR: 714#, MTP: 3242#, ATP: 2852#, MTR: 36.4 BPM, ATR: 34.2 BPM. PU & RIH W/CBP & PERF GUN. SET CBP @ 6340'.**

**STAGE 3: PERF WASATCH 5930'-5936', 4 SPF, 24 HOLES & 5870'-5876', 4 SPF, 24 HOLES. BRK DN PERFS W/2692# @ 1 ½ BPM. ISIP: 2083#, FG: 0.69. PUMP 692 BBLs YF113ST LIQ GEL & 66,760# 20/40 SD. ISIP: 2083#, FG: 0.69. PMP 692 BBLs YF113ST LIQ GEL & 66,700# 20/40 SD. ISIP: 2083#, FG: 0.79, NET PRESS INCR: 549#, MTP: 3918#, ATP: 2816#, MTR: 37 BPM, ATR: 32.8 BPM. RIH & SET CBP @ 5800'. PU & RIH W/3 7/8" BIT. TAG PLUG @ 5800'.**

**5/8/02 FLWG BACK LOAD**

**DO CBP'S @ 5800', 6340', & 6550'. CO TO 6780' W/AIR FOAM. PU & LAND TBG @ 6546', SN @ 6514'. OPEN TO PIT ON FULL OPEN CHK FOR 14 HRS. CP: 450# TO 1000# TO 960#, FTP: 50# TO 100#, 60 BWPH TO 10 BWPH, TRACE SD TO NONE, GAS EST: 1000 MCFPD. TLTR: 3172 BBLs, TLR: 1382 BBLs, LLTR: 1790 BBLs.**

**5/9/02 SI WO FACILITIES**

**FLOW BACK 24 HRS ON FULL OPEN CHK. CP: 925# TO 700#. FTP: AVG 120#, 10 BWPH TO 2 BWPH. TLTR: 3172 BBLs, TLR: 1585 BBLs, LLTR: 1587 BBLs, GAS RATE EST 1200 MCFPD.**

**5/10/02 SI WO FACILITIES.**

**5/13/02 SI WO FACILITIES.**

**5/14/02 SI WO FACILITIES.**

**5/15/02 SI WO FACILITIES. PLAN TO PLACE ON SALES THIS AM.**

**5/16/02 TURNED TO SALES 5/15/02 @ 11:00 AM. SPOT READING: CHK: 20/64", FTP: 560#, CP: 1286#.**

**5/17/02 FLWD 299 MCF, 357 BW, FTP: 180#, CP: 879#, 64/64" CHK, 19 HRS, LP: 71#, TLTR: 3172 BBLs, TLR: 1942 BBLs, LLTR: 1230 BBLs.**

**5/20/02 ON SALES**

**5/19/02: 445 MCF, 0 BC, 321 BW, TP: 80#, CP: 542#, 64/64" CHK, 24 HRS, LP: 68#.  
5/20/02: 446 MCF, 0 BC, 215 BW, TP: 85#, CP: 508#, 64/64" CHK, 24 HRS, LP: 76#.**

**5/21/02 ON SALES**

**435 MCF, 0 BC, 206 BW, TP: 88#, CP: 489#, 64/64" CHK, 24 HRS, LP: 81#. TLTR: 3172 BBLs, TLR: 2329 BBLs, LLTR: 843 BBLs.**

5/22/02

**FLOWING TO SALES**

426 MCF, 0 BC, 72 BW, TP: 81#, CP: 459#, CK: 64/64", 24 HRS, LP: 72#,  
TLTR: 3172 BBLs, TLR: 2401 BBLs, LLTR: 771 BBLs. THE WELL IP ON 5-20-02 FOR 446  
MCF, 0 BC, 215 BW, TP: 85#, CP: 508#, CK: 64/64", 24 HRS, LP: 76#. **FINAL REPORT.**

**RECOMPLETION**

- 11/12/04      PROG: 7:00 AM. HELD SAFETY MEETING, MIRU. 800# SICP, 800# SITP. BLEED PSI OFF (30 MIN). NDWH. NUBOP. STRIP TBG HANGER OUT OF WL. POOH W/TBG. LD 14 JTS TBG. (SCALE). LD BHA. PU 3-7/8" SMITH ROCK BIT & RIH. EOT @ 1800'. SWI. SDFN.
- 11/15/04      PROG: 7:00 AM. HELD SAFETY MEETING, CONT TO RIH W/TBG F: 1800'. TO 5860'. POOH. LD BIT & BIT SUB. MIRU CUTTERS. PU 4-1/2" CIRC & RIH. SET CIRC @ 5750'. POOH RDMO CUTTERS. PU STINGER & RIH W/TBG. FILL CSG W/2% KCL. STING INTO CIRC. MIRU SCHLUMBERGER. EST INJ RT @ 70# @2.5 BPM. MIX & PMP 200 SKS CLASS G CMT. DISPLACE W/9 BBLs WATER. PSI UP TO 1950#. (HELD 10 MIN). UNSTING OUT OF CIRC. PULL 64' TBG. REV OUT W/40 BBLs FRESH WATER. RDMO SCHLUMBERGER. POOH W/10 STANDS TBG. EOT @ 5046'. SWI. SDFN.
- 11/16/04      PROG: WELL ON STAND BY, WAITING TO FRAC, 11/16/04.
- 11/17/04      PROG: HELD SAFETY MEETING. EOT @ 5046', CONT TO POOH W/TBG. PRESS TST BOP & CSG TO 4K PSI. MIRU BJ SERV & CUTTER WL SERV. PU 3-1/8" HSC PERF GUN. RIH, PERF 5036-5050' 4 SPF & 4896-4904' 4 SPF, TOT OF 88 HOLES. POOH, LD WL TLS. RU BJ, PRESS TST SURF EQUIP TO 6K PSI.
- STAGE 1: BRK: 2371#, EST RATE: 32.5 BPM @ 4300#, ISIP: 1150, FG: 0.66, CONT TO PMP INTO ZONE, SD CHECK POC: 91%. FRAC STAGE ACCORDING TO DESIGN W/LTNG 24# GEL. TOT SD: 307,500 LBS, TOT FL: 1795 BBL, ISIP: 2550#, FG: 0.95, NPI: 1400#. MR: 48.6, MP: 4409, AR: 47.0, AP: 4285.
- STAGE 2: RU CWLS, PU 5K CBP & 3-1/8" HSC GUN, RIH, SET CBP @ 4830', PUH, PERF 4794-4806', 4 SPF, TOT OF 48 HOLES. POOH, LD WL TLS, RU BJ. ATTEMPT TO BRK ZONE 6 Xs. COULD NOT GET INTO FORMATION. SD BJ, CALL FOR ACID & RE-SHOOT PERFS IN MORNING. SWI, SDFN.
- 11/18/04      PROG: BJ PMPG SERV DN FOR REPAIRS. RU CWLS, PU DUMP BAILER, RIH SPOT ACID ON PERFS @ 4794-4806', POOH LD BAILER. RU RIG PMP TO CSG, BRK DN PERF W/2500 PSI, EST INJ RATE @ 1.25 BPM @ 1800 PSI. PU 3-3/8" 10' GUN, RIH PERF FROM 4796-4806', 4 SPF, TOT OF 40 HOLES. 23 GR CHARGES, 40" PENE. POOH, LD GUN, PU DMP BAILER, RIH SPOT ACID ACROSS NEW PERFS. POOH, LD BAILER, RD LUBRICATOR, PREP TO FRAC IN MORNING.
- 11/19/04      PROG: HELD SAFETY MEETING. RU BJ SERV. PREST TST SURF LINES TO 6300 PSI. OPEN WELL-30 PSI. PMP INTO FORM, EST RATE-40.2 BPM @ 4500#. ISIP: 1200#, FG: 0.68. FRAC STAGE 2 W/24# LIGHTNING GEL. TOT SD: 203,000 LBS, TOT FL: 1364 BBL. ISIP: 1881#, FG: 0.82, NPI: 680#. SWI. RDMO BJ SERV. RU CWLS, PU NEW STYLE 5K CBP. RIH, SET CBP @ 4740', POOH, LD WL TLS, RDMO CWLS. RU TBG EQ, RIH W/16 STANDS 2-3/8" TBG THAT WOULD NOT DRIFT. LD 32 JTS. PU 3-7/8" ROCK BIT & POBS, RIH W/BIT & TBG, TAG KILL PLUG (TESTED NEW STYLE) @ 4740', RU DRLNG EQUIP, BRK CONV CIRC, DRL PLUG IN 40 MIN, 0# INCR. CONT TO RIH, TAG FILL @ 4810' (20') DRL OUT CBP @ 4830', 10 MIN, 0# INCREASE, CONT TO RIH TO 5256' (206' OF RATHOLE). CIRC HOLE CLEAN. POOH W/TBG STANDING BACK 30 STANDS. SWI, SDFN.

11/20/04

PROG: OPEN UP WL, 10#, FLW WL TO TANK & RIG PMP TO TBG TO KILL WL. CONT TO POOH W/TBG & BIT. LD 3-7/8" BIT & POBS. PU BAKER W/LEG, BAKER 1.81 "R" PROFILE NIPPLE, 6' TBG SUB, BAKER 43AFH PACKER, BAKER L-10 ON/OFF TOOL, RIH W/TOOLS & TBG. HANG OFF TBG. RD FLOOR, ND BOP, NU WH. RU PMP TO CSG, SET PKR W/2400#. FLW TBG TO TANK, RU PMP TO CSG, PRESS CSG TO 1000# FOR MIT TEST, HELD-NO BLEED OFF. CALL FOR DELSCO TO PULL RB2 PLUG & BRING IN FLWBACK CREW IN MORNING. RACK OUT EQUIP, RD RIG, RR TO NBU1022-11F.

DN HOLE DETAIL: W/LEG-0.40', 1.81 "R" NIPPLE-1.0', 2-3/8" PUP JT-6', BAKER 43AFH HYDRAULIC SET PKR-6.20', BAKER L-10 ON/OFF TOOL-1.85', 152 JTS J-55 2-3/8" TBG-4690.28', 7-1/16" TBG HNGR-1.0. EOT: 4721.73'

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

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

**X Change of Operator (Well Sold)**

Operator Name Change/Merger

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

1/6/2006

<b>FROM:</b> (Old Operator): N2115-Westport Oil & Gas Co., LP 1368 South 1200 East Vernal, UT 84078 Phone: 1-(435) 781-7024	<b>TO:</b> ( New Operator): N2995-Kerr-McGee Oil & Gas Onshore, LP 1368 South 1200 East Vernal, UT 84078 Phone: 1-(435) 781-7024
---	--

CA No.		Unit:						
WELL NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS

**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: 5/10/2006
- (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 5/10/2006
- The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 3/7/2006
- Is the new operator registered in the State of Utah: YES Business Number: 1355743-0181
- a. (R649-9-2)Waste Management Plan has been received on: IN PLACE
- b. Inspections of LA PA state/fee well sites complete on: n/a 3 LA wells & all PA wells transferred
- c. 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 3/27/2006 BIA not yet
- Federal and Indian Units:**  
The BLM or BIA has approved the successor of unit operator for wells listed on: 3/27/2006
- 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")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 12/15/2006

**DATA ENTRY:**

- Changes entered in the **Oil and Gas Database** on: 12/15/2006
- Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 12/15/2006
- Bond information entered in RBDMS on: 12/15/2006
- Fee/State wells attached to bond in RBDMS on: 12/16/2006
- Injection Projects to new operator in RBDMS on: \_\_\_\_\_
- Receipt of Acceptance of Drilling Procedures for APD/New on: n/a Name Change Only

**BOND VERIFICATION:**

- Federal well(s) covered by Bond Number: CO1203
- Indian well(s) covered by Bond Number: RLB0005239
- (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number RLB0005236
- a. The **FORMER** operator has requested a release of liability from their bond on: n/a rider added KMG  
The Division sent response by letter on: \_\_\_\_\_

**LEASE INTEREST OWNER NOTIFICATION:**

- (R649-2-10) The **FORMER** 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: 5/16/2006

**COMMENTS:**

Westport Oil Gas Co LP (N2115) to Kerr-Mcgee Oil Gas Onshore, LP (N2995) sorted by Unit, Lease Type API

well_name	sec	twsp	rng	api	entity	lease	well	stat
WELLINGTON FED 44-6 SWD	06	140S	110E	4300730912	13919	Federal	WD	A
WELLINGTON FED 22-04 SWD	04	140S	110E	4300730967	14826	Federal	WD	A
SOUTHMAN CANYON U 3	15	100S	230E	4304715880	99990	Federal	WD	A
OURAY SWD 1	01	090S	210E	4304733449	13274	Fee	WD	A
				NATURAL BUTTES UNIT				
NBU 21-20B	20	090S	200E	4304730359	2900	Federal	WD	A
CIGE 9	36	090S	220E	4304730419	2900	State	WD	A
NBU 159	35	090S	210E	4304731996	2900	State	WD	A
NBU 47N2	30	100S	220E	4304730534	2900	Federal	WI	A
NBU 347	11	100S	220E	4304733709	2900	State	WI	A

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

UIC FORM 5

**TRANSFER OF AUTHORITY TO INJECT**

Well Name and Number Several-See Attached		API Number
Location of Well		Field or Unit Name Natural Buttes
Footage :	County : Uintah	Lease Designation and Number
QQ, Section, Township, Range:	State : UTAH	

**EFFECTIVE DATE OF TRANSFER:** 1/6/2006

**CURRENT OPERATOR**

*N2115*

Company: <u>Westport Oil and Gas Company</u>	Name: <u>Carroll Estes</u>
Address: <u>1368 South 1200 East</u>	Signature: <u><i>Carroll Estes</i></u>
<u>city Vernal state UT zip 84078</u>	Title: <u>Principal Environmental Specialist</u>
Phone: <u>(435) 789-4433</u>	Date: <u>12/14/2006</u>
Comments:	

**NEW OPERATOR**

*N2995*

Company: <u>Kerr McGee Oil and Gas Company, LP</u>	Name: <u>Carroll Estes</u>
Address: <u>1368 South 1200 East</u>	Signature: <u><i>Carroll Este</i></u>
<u>city Vernal state UT zip 84078</u>	Title: <u>Staff Environmental Specialist</u>
Phone: <u>(435) 789-4433</u>	Date: <u>12/14/2006</u>
Comments:	

(This space for State use only)

Transfer approved by: *Don Jones*  
 Title: *UIC Geologist*

Approval Date: *12/20/06*

Comments:

*Only applies to Wellington Fed 44-6  
 and Wellington Fed 22-04.  
 All other wells are in Indian country  
 and need EPA approval*

(5/2000)

**RECEIVED**

**DEC 15 2006**

DIV. OF OIL, GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

**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.  
**MULTIPLE LEASES**  
6. If Indian, Allottee or Tribe Name

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

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

**MUTIPLE WELLS**

9. API Well No.  
10. Field and Pool, or Exploratory Area  
11. County or Parish, State  
**UINTAH COUNTY, UTAH**

1. Type of Well  
 Oil Well  Gas Well  Other  
2. Name of Operator  
**KERR-McGEE OIL & GAS ONSHORE LP**  
3a. Address  
**1368 SOUTH 1200 EAST VERNAL, UT 84078**  
3b. Phone No. (include area code)  
**(435) 781-7024**  
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**SEE ATTACHED**

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<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
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input checked="" type="checkbox"/> Other <b>CHANGE OF OPERATOR</b>

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 recompleat 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 recompleat 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.

PLEASE BE ADVISED THAT KERR-McGEE OIL & GAS ONSHORE LP, IS CONSIDERED TO BE THE OPERATOR OF THE ATTACHED WELL LOCATIONS. EFFECTIVE JANUARY 6, 2006.  
KERR-McGEE OIL & GAS ONSHORE LP, IS RESPONSIBLE UNDER TERMS AND CONDITIONS OF THE LEASE(S) FOR THE OPERATIONS CONDUCTED UPON LEASE LANDS. BOND COVERAGE IS PROVIDED BY STATE OF UTAH NATIONWIDE BOND NO. RLB0005237.

**RECEIVED**  
**MAY 10 2006**

**BLM BOND = C 01203**  
**BIA BOND = RLB0005239**

**APPROVED 5116106**  
*Earlene Russell*

DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed) **RANDY BAYNE** Title **DRILLING MANAGER**  
Signature *Randy Bayne* Date **May 9, 2006**  
**Division of Oil, Gas and Mining**  
**Earlene Russell, Engineering Technician**

**THIS SPACE FOR FEDERAL OR STATE USE**

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

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

**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.

**MULTIPLE LEASES**

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE – Other instructions on reverse side**

1. Type of Well

Oil Well  Gas Well  Other

8. Well Name and No.

**MUTIPLE WELLS**

2. Name of Operator

**WESTPORT OIL & GAS COMPANY L.P.**

9. API Well No.

3a. Address

**1368 SOUTH 1200 EAST VERNAL, UT 84078**

3b. Phone No. (include area code)

**(435) 781-7024**

10. Field and Pool, or Exploratory Area

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

**SEE ATTACHED**

11. County or Parish, State

**UINTAH COUNTY, UTAH**

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 checked="" 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 CHANGE OF OPERATOR
	<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 recompleat 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 recompleat 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.

EFFECTIVE JANUARY 6, 2006, WESTPORT OIL & GAS COMPANY L.P., HAS RELINQUISHED THE OPERATORSHIP OF THE ATTACHED WELL LOCATIONS TO KERR-McGEE OIL & GAS ONSHORE LP.

**APPROVED** 5/16/06  
*Earlene Russell*  
**Division of Oil, Gas and Mining**  
**Earlene Russell, Engineering Technician**

**RECEIVED**  
**MAY 10 2006**

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

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

Name (Printed/Typed)

**BRAD LANEY**

Title

**ENGINEERING SPECIALIST**

Signature

Date

**May 9, 2006**

**THIS SPACE FOR FEDERAL OR STATE USE**

Approved by

*Brad Laney*

Title

Date

**5-9-06**

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, 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.



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Colorado State Office  
2850 Youngfield Street  
Lakewood, Colorado 80215-7076

IN REPLY REFER TO:

CO922 (MM)  
3106  
COC017387 et. al.

March 23, 2006

### NOTICE

Kerr-McGee Oil & Gas Onshore L.P. :  
1999 Broadway, Suite 3700 : Oil & Gas  
Denver, CO 80202 :

#### Merger/Name Change - Recognized

On February 28, 2006 this office received acceptable evidence of the following mergers and name conversion:

Kerr-McGee Oil & Gas Onshore L.P., a Delaware Limited Partnership, and Kerr-McGee Oil & Gas Onshore LLC, a Delaware Limited Partnership merger with and into Westport Oil and Gas Company L.P., a Delaware Limited Partnership, and subsequent Westport Oil & Gas Company L.P. name conversion to Kerr-McGee Oil & Gas Onshore L.P.

For our purposes the merger and name conversion was effective January 4, 2006, the date the Secretary of State of Delaware authenticated the mergers and name conversion.

Kerr-McGee Oil & Gas Onshore L.P. provided a list of oil and gas leases held by the merging parties with the request that the Bureau of Land Management change all their lease records from the named entities to the new entity, Kerr-McGee Oil & Gas Onshore L.P. In response to this request each state is asked to retrieve their own list of leases in the names of these entities from the Bureau of Land Management's (BLM) automated LR2000 data base.

The oil and gas lease files identified on the list provided by Kerr-McGee Oil & Gas Onshore L.P. have been updated as to the merger and name conversion. We have not abstracted the lease files to determine if the entities affected by the acceptance of these documents holds an interest in the lease, nor have we attempt to identify leases where the entity is the operator on the ground that maintains vested record title or operating rights interests. If additional documentation, for change of operator, is required you will be contacted directly by the appropriate Field Office. The Mineral Management Services (MMS) and other applicable BLM offices were notified of the merger with a copy of this notice

Please contact this office if you identify additional leases where the merging party maintains an interest, under our jurisdiction, and we will document the case files with a copy of this notice. If the leases are under the jurisdiction of another State Office that information will be forwarded to them for their action.

Three riders accompanied the merger/name conversion documents which will add Kerr-McGee Oil and Gas Onshore LLC as a principal to the 3 Kerr-McGee bonds maintained by the Wyoming State Office. These riders will be forward to them for their acceptance.

The Nationwide Oil & Gas Continental Casualty Company Bond #158626364 (BLM Bond #CO1203), maintained by the Colorado State Office, will remain in full force and effect until an assumption rider is accepted by the Wyoming State Office that conditions their Nationwide Safeco bond to accept all outstanding liability on the oil and gas leases attached to the Colorado bond.

If you have questions about this action you may call me at 303.239.3768.

/s/Martha L. Maxwell  
Martha L. Maxwell  
Land Law Examiner  
Fluid Minerals Adjudication

Attachment:

List of OG Leases to each of the following offices:

MMS MRM, MS 357B-1

WY, UT, NM/OK/TX, MT/ND, WY State Offices

CO Field Offices

Wyoming State Office

Rider #1 to Bond WY2357

Rider #2 to Bond WY1865

Rider #3 to Bond WY1127



# 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>

IN REPLY REFER TO:

3106

(UT-922)

March 27, 2006

### Memorandum

To: Vernal Field Office

From: Chief, Branch of Fluid Minerals

Subject: Merger Approval

Attached is an approved copy of the merger recognized by the Bureau of Land Management, Colorado State Office. We have updated our records to reflect the merger from Westport Oil and Gas Company L.P. into Kerr-McGee Onshore Oil and Gas Company. The merger was approved effective January 4, 2006.

Chief, Branch of  
Fluid Minerals

### Enclosure

Approval letter from BLM COSO (2 pp)

cc: MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225  
State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114  
Teresa Thompson  
Joe Incardine  
Connie Seare  
Dave Mascarenas  
Susan Bauman

RECEIVED

MAR 28 2006

DIV. OF OIL, GAS & MINING

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

FORM 9

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>			5. LEASE DESIGNATION AND SERIAL NUMBER: <b>U-01197-A-ST</b>
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____			7. UNIT or CA AGREEMENT NAME: <b>UNIT #891008900A</b>
2. NAME OF OPERATOR: <b>KERR MCGEE OIL &amp; GAS ONSHORE LP</b>			8. WELL NAME and NUMBER: <b>NBU 347</b>
3. ADDRESS OF OPERATOR: <b>1368 SOUTH 1200 EAST</b> CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>		PHONE NUMBER: <b>(435) 781-7024</b>	9. API NUMBER: <b>4304733709</b>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <b>1697'FSL, 411'FWL</b>			10. FIELD AND POOL, OR WILDCAT: <b>NATURAL BUTTES</b>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWSW 11 10S 22E</b>			COUNTY: <b>UINTAH</b>
			STATE: <b>UTAH</b>

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

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
**4/15/2006: PMP 5 BBLS 15% HCL ACID**

NAME (PLEASE PRINT) <u>SHEILA UPCHEGO</u>	TITLE <u>REGUALTORY ANALYST</u>
SIGNATURE	DATE <u>5/17/2006</u>

(This space for State use only)

**RECEIVED**  
**MAY 26 2006**  
DIV. OF OIL, GAS & MINING



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

1595 Wynkoop Street  
DENVER, CO 80202-1129  
Phone 800-227-8917  
<http://www.epa.gov/region08>

APR 25 2008

Ref: 8ENF-UFO

CERTIFIED MAIL 7006-3450-0002-2006-0223  
RETURN RECEIPT REQUESTED

Grizz Oleen, Principal Environmental Specialist  
Kerr McGee Oil and Gas Company, L.P.  
1368 South 1200 East  
Vernal, Utah 84078

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

43 047 33769  
105 22E 11

Re: Underground Injection Control (UIC)  
Permission To Resume Injection  
Natural Buttes #347 SWD Well  
EPA Permit# UT20973-06399  
Natural Buttes Oil Field  
Uintah County, Utah

Dear Mr. Oleen:

On April 24, 2008, EPA received information from you on the above referenced well concerning the workover to replace the tubing and packer and the follow-up mechanical integrity test (MIT) conducted on April 21, 2008. The data submitted shows that the well passed the required MIT. Therefore, pursuant to Title 40 of the Code of Federal Regulations Section 144.51(q)(2) (40 C.F.R. §144.51(q)(2)), permission to resume injection is granted. Under continuous service, the next MIT will be due on or before April 21, 2013.

Pursuant to 40 C.F.R. §144.52(a)(6), if the well is not used for a period of at least two (2) years ("temporary abandonment"), it shall be plugged and abandoned unless EPA is notified and procedures are described to EPA ensuring the well will not endanger underground sources of drinking water ("non-endangerment demonstration") during its continued temporary abandonment. A successful MIT is an acceptable non-endangerment demonstration and would be necessary every two (2) years the well continues in temporary abandonment.

Failure to comply with a UIC Permit, or the UIC regulations found at 40 C.F.R. Parts 144 through 148 constitute one or more violations of the Safe Drinking Water Act, 42 U.S.C. §300h. Such non-compliance may subject you to formal enforcement by EPA, as codified at 40 C.F.R. Part 22.

RECEIVED

MAY 01 2008

DIV. OF OIL, GAS & MINING

If you have any questions concerning this letter, you may contact Nathan Wiser at (303) 312-6211. Please direct all correspondence to the attention of Nathan Wiser at Mail Code 8ENF-UFO.

Sincerely,



Mark A.R. Chalfant  
Director  
Technical Enforcement Program

cc: Curtis Cesspooch, Chairman  
Uintah & Ouray Business Committee  
P.O. Box 190  
Fort Duchesne, Utah 84026

Shaun Chapoose, Land Use Department Director  
Ute Indian Tribe  
P.O. Box 460  
Fort Duchesne, Utah 84026

Gil Hunt  
Utah Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> U-01197-A-ST
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Water Disposal Well		<b>8. WELL NAME and NUMBER:</b> NBU 347
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>9. API NUMBER:</b> 43047337090000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6515 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1697 FSL 0411 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 11 Township: 10.0S Range: 22.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 6/24/2011  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> <b>PLUG AND ABANDON</b> <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>The operator requests authorization to plug and abandon this SWD well. Attached is the proposed plugging procedure. Please contact the undersigned if you have any questions and/or concerns. Thank you.</p> <p style="text-align: right;"><b>Approved by the Utah Division of Oil, Gas and Mining</b></p> <p style="text-align: right;"><b>Date:</b> <u>07/18/2011</u></p> <p style="text-align: right;"><b>By:</b> <u><i>Derek Duff</i></u></p>		
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 6/23/2011

**Please Review Attached Conditions of Approval**

**RECEIVED** Jun. 23, 2011



**The Utah Division of Oil, Gas, and Mining**

- State of Utah  
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Sundry Conditions of Approval Well Number 43047337090000**

- 1. Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338. 2. Amend Plug #2: CICR shall be set @ 4744' (50' above the perfs). M&P 30 sx cement, sting into CICR pump 25sx, sting out and dump 5 sx on top of CICR. This will adequately isolate the injection interval.**
- 3. Add Plug #3A: A 200' plug ( $\pm 16$  sx) shall be balanced from  $\pm 2700'$  to 2500'. This will isolate the base of the Parachute Creek Member as required by Cause 190-5(B).**
- 4. Amend Plug #4: Casing shall be perforated @ 1155' and CICR shall be set @ 1105' (50' above the perfs). M&P 67 sx cement, sting into CICR pump 56 sx, sting out and dump 11 sx on top of CICR. This will isolate the top of the Parachute Creek Member as required by Cause 190-5(B).**
- 5. All balanced plugs shall be tagged to ensure that they are at the depth specified.**
- 6. All annuli shall be cemented from a minimum depth of 100' to the surface.**
- 7. Surface reclamation shall be done in accordance with R649-3-34 – Well Site Restoration.**
- 8. All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply.**
- 9. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (ofc) or 801-733-0983 (home) prior to continuing with the procedure.**
- 10. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.**

6/28/2011

# Wellbore Diagram

r263

API Well No: 43-047-33709-00-00 Permit No: Well Name/No: NBU 347

Company Name: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Location: Sec: 11 T: 10S R: 22E Spot: NWSW

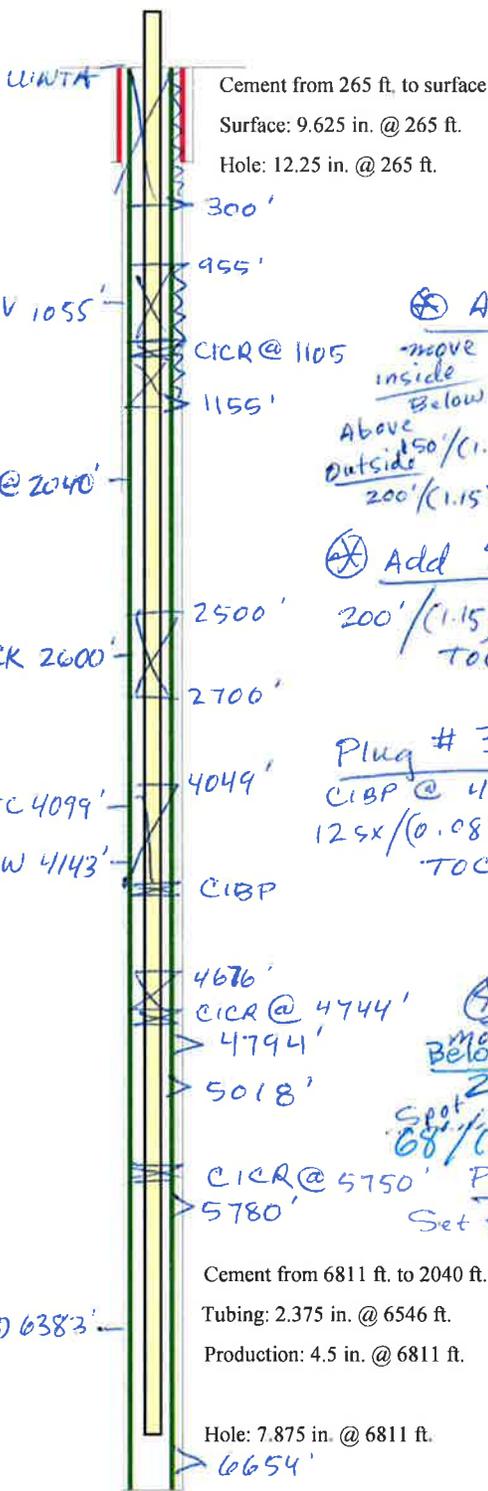
Coordinates: X: 635418 Y: 4424426

Field Name: NATURAL BUTTES

County Name: UINTAH

### String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)	Capacity (CF/T)
HOL1	265	12.25			
SURF	265	9.625	36	265	
HOL2	6811	7.875			
PROD	6811	4.5	11.6	6811	0.0872
T1	6546	2.375			



Plug # 5  
 inside  $300' / (1.15 \times 0.0872) = 235X$   
 Hole  $35' / (1.15 \times 0.2988) = 95X$   
 CSQ  $265' / (1.15 \times 0.2843) = 1055X$

TOC @ SFC  
 ✓ O.K.

### Amend Plug # 4

move CICKR to w/in 50' of perfs (1105') move perf to 1155'  
 inside  $50' / (1.15 \times 0.0872) = 45X$   
 Above  $150' / (1.15 \times 0.0872) = 115X$   
 Outside  $200' / (1.15 \times 0.2988) = 525X$   
 10% WO

### Cement Information

String	BOC (ft sub)	TOC (ft sub)	Class	Sacks
PROD	6811	2040	LT	330
PROD	6811	2040	PC	883
SURF	265	0	PM	130

TOC @ 955' ✓ O.K.

### Add Plug 3A 67' total

$200' / (1.15 \times 0.0872) = 165X$   
 TOC @ 2500' ✓ O.K.

### Perforation Information

Top (ft sub)	Bottom (ft sub)	Shts/Ft	No Shts	Dt Squeeze
4794	5018			
5780	6654			

Plug # 3  
 CIBP @ 4193'  
 $125X / (0.0872 \times 1.15) = 158'$   
 TOC @ 4049'  
 ✓ O.K.

### Amend Plug # 2

move CICKR w/in 50' of perf (4744')  
 Below  $255X / (0.0872 \times 1.15) = 330' \text{ max}$   
 Spot  $68' / (1.15 \times 0.0872) = 55X$   
 TOC @ 4676' ✓ O.K.

### Formation Information

Formation	Depth
UNTA	0
GRRV	1055
PARCK	2600
WSTC	4099
BMSW	4143
MVRD	6383

Plug # 1  
 Set & Squeezed  
 11/15/04

TD: 6811 TVD: PBTB: 6780

Well Name: **NBU 347**  
 Surface Location: NWSW SEC. 11, T10S, R22E  
 1697' FSL & 411' FWL  
 Uintah County, UT

6/22/2011

API: 4304733709 LEASE#: U-01197-A-ST

ELEVATIONS: 5128' GL 5143' KB

TOTAL DEPTH: 6811' PBTD: 5750' (CICR)

SURFACE CASING: 12 ¼" Hole  
 9 5/8", 36# K-55 @ 265' (GL)

PRODUCTION CASING: 7 7/8" Hole  
 4 1/2", 11.6#, N-80 @ 6811'  
 TOC @ 1454' per CBL

PERFORATIONS: Wasatch 4794' - 5050'  
 Wasatch 5780' - 5936' Squeezed & Excluded by CICR  
 Mesaverde 6408' - 6654' Squeezed & Excluded by CICR

Tubular/Borehole	Drift inches	Collapse psi	Burst psi	Capacities		
				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1624	0.0217	0.0039
4.5" 11.6# N-80	3.875	6350	7780	0.6528	0.0872	0.0155
9.625" 36# K-55	8.921	2020	3520	3.247	0.434	0.0773
<b>Annular Capacities</b>						
2.375" tbg. X 4 ½" 11.6# csg				0.4227	0.0565	0.0101
4.5" csg X 9 5/8" 36# csg				2.227	0.2977	0.053
4.5" csg X 7.875 borehole				1.704	0.2276	0.0406
9 5/8" csg X 12 1/4" borehole				2.3436	0.3132	0.0558

Formation	Depth to top, ft.	Tech. Pub. #92 Base of USDW's
Uinta	Surface	USDW Depth ~4143' KBE
Green River	1055'	
Wasatch	4099'	
Mesaverde	6383'	

**NBU 347 PLUG & ABANDONMENT PROCEDURE****GENERAL**

- H2S MAY BE PRESENT. CHECK FOR H2S AND TAKE APPROPRIATE PRECAUTIONS.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, YIELD 1.145 CUFT./SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESPONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME. WHEN SQUEEZING, INCLUDE 10% EXCESS PER 1000' OF DEPTH.
- TREATED FRESH WATER WILL BE PLACED BETWEEN ALL PLUGS INSTEAD OF BRINE.
- ALL DISPLACEMENT FLUID SHALL CONTAIN CORROSION INHIBITOR AND BIOCIDES. PREMIX 5 GALLONS PER 100 BBLS FLUID.
- NOTIFY DIRECTOR OF EPA IN WRITING 45 DAYS PRIOR TO PLUGGING AN INJECTION WELL.
- ALL CEMENT PLUGS TO BE SET WITH TUBING.
- NOTIFY UDOGM 24 HOURS BEFORE MOVING ON LOCATION.
- A GPS READING WILL NEED TO BE TAKEN AT THE WELL SITE AND RECORDED IN OPENWELLS. PLEASE TAKE IT TO THE 6TH DECIMAL PLACE.

**PROCEDURE**

**Note:** This procedure is written according to the Proposed P&A plan attached as Appendix E in the Final UIC Permit for the NBU 347 SWD well.

**Note:** An estimated ~184 sx Class "G" cement needed for procedure

1. MIRU. KILL WELL AS NEEDED. ND WH, NU AND TEST BOPE.
2. **PLUG #1, ISOLATE WASATCH/MESAVERDE PERFORATIONS (5780'-6654')**: PERFS WERE SQUEEZED AND A CICR WAS SET @ 5750' DURING CONVERSION OF NBU 347 TO A SALT WATER DISPOSAL WELL IN 2004.
3. **PLUG #2, ISOLATE EXISTING WASATCH PERFORATIONS (4794' - 5050')**: PU & RIH W/ 4 ½" CICR, SET @ ~4700'. RIH W/ TBG & STING INTO CICR & SQUEEZE PERFS W/ APPROXIMATELY **25 SX / 5.1 BBL / 28.6 CUFT** OR SUFFICIENT VOLUME TO FILL CSG & ANNULUS TO 4700'. STING OUT OF CICR AND SPOT **2 SX / 0.4 BBL / 2.29 CUFT** CMT ON TOP OF CICR. BRK CIRC W/ FRESH WATER. POOH ABOVE TOC (~4676'). REVERSE CIRCULATE W/ TREATED FRESH WATER.
4. **PLUG #3, PROTECT TOP OF WASATCH (4155') & BASE OF USDW (~4143')**: POOH. PU & RIH W/ 4 ½" CIBP, SET @ ~4193'. SPOT **12 SX / 2.5 BBL / 13.74 CUFT** CMT ON TOP OF CIBP. BRK CIRC W/ FRESH WATER. POOH ABOVE TOC (~4049'). REVERSE CIRCULATE W/ TREATED FRESH WATER.
5. **PLUG #4, PROTECT TOP OF GREEN RIVER (~1055')**: POOH W/ TUBING. RIH W/ WIRELINE & PERFORATE @ 1105' W/ 4 SPF. POOH. PU & RIH W/ 4 ½" CICR, SET @ ~1005'. RIH W/ TBG & STING INTO CICR & SQUEEZE PERFS W/ APPROXIMATELY **30 SX / 6.1 BBL / 34.4 CUFT** OR SUFFICIENT VOLUME TO FILL CSG & ANNULUS TO 1005'. STING OUT OF CICR. REVERSE CIRCULATE W/ TREATED FRESH WATER.
6. **PLUG #5, CEMENT SURFACE CASING SHOE (202' KB) & SURFACE HOLE**: POOH W/ TBG. RIH W/ WIRELINE, PERFORATE @ 300' W/ 4 SPF. POOH W/ WIRELINE. RU CEMENT SERVICE TO PROD CSG. PUMP A MINIMUM OF **115 SX** TO CIRCULATE CEMENT TO SURFACE INSIDE OF 4 ½" CASING AND ANNULUS.
7. CUT OFF WELLHEAD AND INSTALL MARKER PER BLM GUIDELINES.
8. RDMO. TURN OVER TO OPERATIONS FOR SURFACE REHAB.

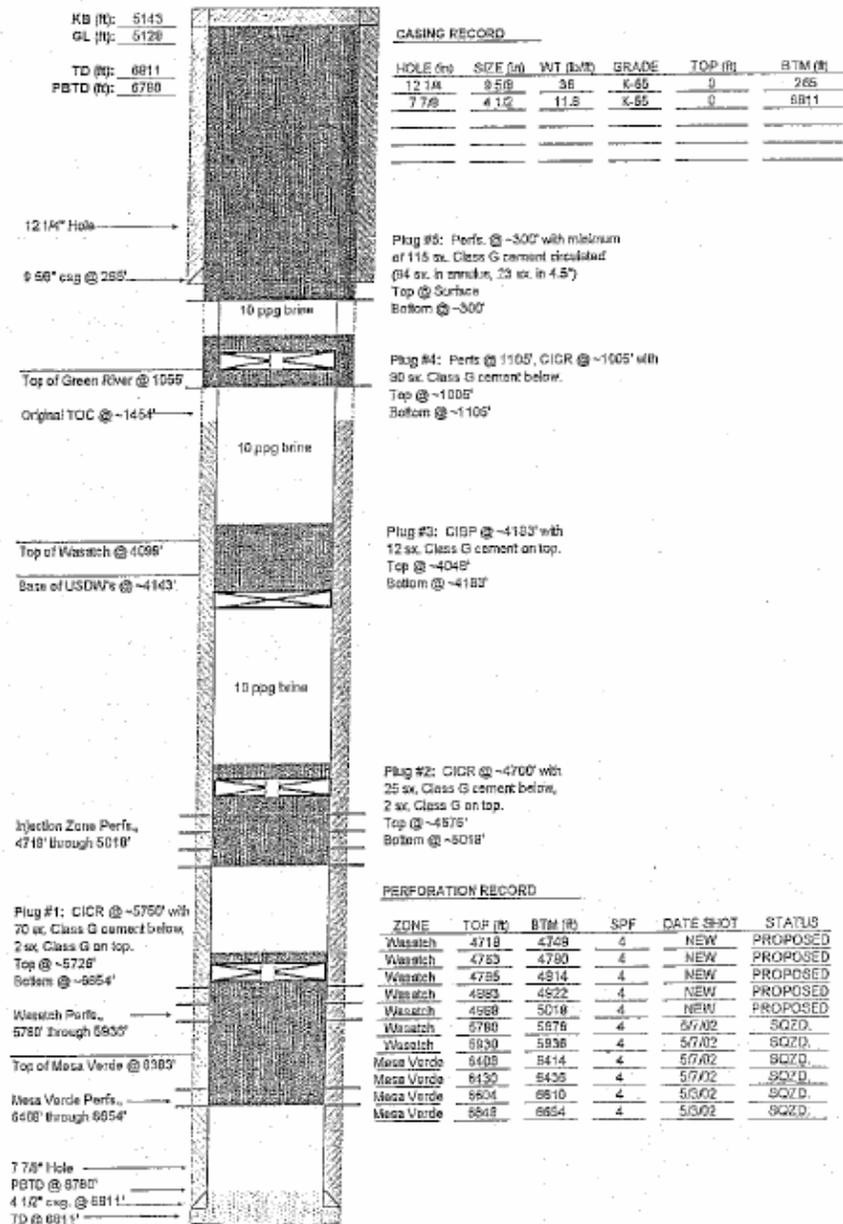
ALM 6/22/11

61347  
 USW-Sec. 11-T10S-R22E  
 Underground Injection Control  
 Permit Application

ATTACHMENT G3

WELL: HBU 347      CNTY: UTAH      FT.: 1607' FSL, 411' PWSL  
 FIELD: NATURAL BUTTES      STATE: UTAH      Q-Q: NWEW  
 API# 43-047-33709      SEC.: 11  
 LEASE N: U-01197-A-B7      TWS: 106  
 EPA PERMIT #:      RGE: 22E

PROPOSED P&A WELLBORE DIAGRAM



W. Sec. 11-T10S-R22E  
Underground Injection Control  
Permit Application

ATTACHMENT O2

NBU 347

P&A PROCEDURE

1. Notify EPA two weeks in advance so that EPA representative may be present during P&A operations.
2. MIRU. ND WH, NU & test BOPE. Release packer and TOH.
3. Clean out to 5724' PBDT with bit and scraper. Circulate well clean. TOH.
4. Plug #2 - Injection Zone Perforations: TIH with CICR on tubing and set same at 4700'. Establish injection rate and cement squeeze perforations 4718' through 5018' with a minimum of 25 sx (28.8 cuft) Class G cement. Sting out of CICR and spot 2 sx. on top. Circulate tubing clean and displace well to 4000' with 10 ppg brine. TOH.
5. Plug #3 - Base of USDW's (~4143') and Wasatch Top (4099'): Set CIBP at 4193' and spot 144' of Class G cement on top (~12 sx., 13.8 cuft). Circulate tubing clean and displace well to 1055' with 10 ppg brine.
6. Plug #4 - Green River Top (1055'): Perforate at 1105', set CICR at 1005' and squeeze 30 sx. (34.5 cuft) Class G cement under CICR. Sting out of CICR, circulate tubing clean and displace well to 300' with 10 ppg brine.
7. Plug #5 - Surface Casing Shoe (265'): Perforate at 300', open surface casing valves and establish circulation down 4.5" casing and up 4.5" X 9.625" annulus. Circulate cement around surface casing shoe until casing and annulus are filled (minimum 115 sx Class G, 132.3 cuft).
8. Cut off wellhead and install P&A monument per EPA/BLM requirements.
9. RDMO. Turn well over to Operations for surface rehab.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> U-01197-A-ST
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Water Disposal Well		<b>8. WELL NAME and NUMBER:</b> NBU 347
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>9. API NUMBER:</b> 43047337090000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6515 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1697 FSL 0411 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 11 Township: 10.0S Range: 22.0E Meridian: S		<b>COUNTY:</b> UINTAH
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 9/28/2011		<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> SPUD REPORT Date of Spud:		
<input type="checkbox"/> DRILLING REPORT Report Date:		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>The operator has concluded the plug and abandonment operations on the subject well on 09/28/2011. This well is now plugged and abandoned. Please see the attached chronological well history.</p>		
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 9/30/2011

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 347 SWD		Spud Date: 9/7/2001						
Project: UTAH-UINTAH			Site: NBU 347 SWD				Rig Name No: LEED 698/698	
Event: ABANDONMENT			Start Date: 9/26/2011			End Date: 9/28/2011		
Active Datum: GL @5,128.00ft (above Mean Sea Level)				UWI: NBU 347 SWD				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/26/2011	7:00 - 7:30	0.50	ALL	48		P		HSM, REVIEW RIGGING UP.
	7:30 - 9:00	1.50	ALL	30	A	P		MIRU.
	9:00 - 11:30	2.50	ALL	47	A	P		ALL BOLTS ON WELL HEAD FLANGE RUSTED UP, TBG FLOWING TO F.B. TNK.
	11:30 - 13:00	1.50	ALL	35	F	P		RU DELSCO WIRELINE, RIH & SET TBG PLUG , POOH, RD DELSCO WIRELINE.
	13:00 - 18:00	5.00	ALL	45	A			ND WH, NU BOP'S, RU FLOOR & TBG EQUIPMENT, UNSET PKR, RU SCAN TECH, POOH INSPECTING 151 JTS. J-55 TBG, LD 7JTS. WALL LOSS, RD SCAN TECH, SWI, SDFN.
9/27/2011	7:00 - 7:30	0.50	ALL	48		P		HSM, RIH W/ CICR
	7:30 - 9:30	2.00	ALL	46	E	S		WELL FLOWING, RU DELSCO, INSTALL TBG PLUG
	9:30 - 13:30	4.00	ALL	31	I	P		PU 4-1/2 CICR & RIH 153 JTS. 2-3/8 J-55 TBG, SET CICR @ 4744', RU DELSCO, RIH TO RETRIEVE TBG PLUG, RD DELSCO,
	13:30 - 14:15	0.75	ALL	51	A	P		PLG #2) RU PRO PETRO, P.T. LINES 2000 PSI. EST INJ RATE @ 650 PSI. @ 2.0 BPM, PUMP 2.0 BBLS FRESH WTR, 6.1 BBLS (25 SKS) CLASS "G" CMT, 1 BBL FRESH WTR, & DISP W/ 16.35 BBLS, STING OUT OF CICR & SPOT 1 BBL CMT ON TOP OF CICR, RD PRO PETRO.
	14:15 - 16:45	2.50	ALL	31	I	P		POOH & LD 19 JTS. ON TRAILER, POOH 135 JTS.TBG, PU CIBP & RIH 135 JTS. TBG & SET CIBP @ 4193'.
	16:45 - 17:30	0.75	ALL	51	C	P		PLG #3) RU PRO PETRO, FILL CSG, PUMP 2.6 BBLS FRESH WTR, 2.45 BBLS (12 SKS) CLASS "G" CMT, 1 BBL FRESH WTR, & DISP W/ 14.5 BBLS. RD PRO PETRO.
9/28/2011	17:30 - 19:00	1.50	ALL	31	I	P		POOH & LD 48 JTS. 2-3/8 J-55 TBG ON TRAILER, POOH 86 JTS. SWI, SDFN.
	7:00 - 7:15	0.25	ALL	48		P		HSM, REVIEW SETTING CIBP.
	7:15 - 8:00	0.75	ALL	34	I	P		RU J-W WIRELINE SERVICES, RIH W/ 4-1/2 CIBP & SET @ 2700', POOH, RD J-W WIRELINE SERVICES.
	8:00 - 9:00	1.00	ALL	31	I	P		RIH 86 JTS. TAG CIBP @ 2700' PU TBG OFF PLUG 5'
	9:00 - 9:30	0.50	ALL	51	D	P		PLG #3A) RU PRO PETRO, FILL HOLE W/ 5 BBLS, PUMP 2.6 BBLS FRESH WTR, 3.1 BBLS (16 SKS) CLASS "G" CMT, 1 BBL FRESH WTR, DISP W/ 8.5 BBLS. RD PRO PETRO.
	9:30 - 12:15	2.75	ALL	31	I	P		POOH LD 52 JTS, 2-3/8 J-55 TBG ON TRAILER, POOH REMAINING TBG, DUG SURFACE CSG VALUE CELLAR W/ BACK-HOE TO HOOK-UP LINE TO PIT TO CIRC CMT.
	12:15 - 12:45	0.50	ALL	34	H	P		RU J-W WIRELINE SERVICES, RIH & PERFORATED CSG @ 1155', W/ 3" CSG GUN, 4 SPF, POOH, RD J-W WIRELINE SERVICES.
	12:45 - 13:30	0.75	ALL	31	I	P		PU 4-1/2 CICR & RIH 35 JTS.TBG, SET CICR @ 1105'

US ROCKIES REGION  
Operation Summary Report

Well: NBU 347 SWD

Spud Date: 9/7/2001

Project: UTAH-UINTAH

Site: NBU 347 SWD

Rig Name No: LEED 698/698

Event: ABANDONMENT

Start Date: 9/26/2011

End Date: 9/28/2011

Active Datum: GL @5,128.00ft (above Mean Sea Level)

UWI: NBU 347 SWD

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	13:30 - 14:00	0.50	ALL	51	A	P		PLG #4) RU PRO PETRO, FILL HOLE, CAUGHT CIRC W/ 6 BBLS, STING IN PUMP TO EST INJ RATE @ 2.0 BPM @ 0 PSI. PUMP 30 BBLS WTR, PUMP 2.0 BBLS FRESH WTR, 13.7 BBLS, (57 SKS) 1 BBL FRESH WTR, 1 BBL T-MAC, STRING OUT CONTINUE DISP 1.6 BBLS, 11SKS
	14:00 - 14:30	0.50	ALL	31	I	P		POOH & LD 35 JTS. 2-3/8 J-55 TBG ON TRAILER.
	14:30 - 15:00	0.50	ALL	34	H			RU J-W WIRELINE SEVICES, RIH 3" CSG GUN & PERFORATED 4 SPF @ 300', RD J-W WIRELINE COMPANY.
	15:00 - 18:00	3.00	ALL	51	B	P		RU PRO PETRO, PUMP 5 BBLS FRESH WTR TO EST CIRC, RD FLOOR & TBG EQUIPMENT, ND BOP'S, FILL HOLE W/ 25 BBLS, MIX & PUMP (200 SKS) CLASS "G" CMT NO CIRC, ORDERD MORE CMT, CUT OFF WH, TOP W/ 500 SKS CMT, FILL 4-2 CSG, INSTALL MARKER PLATE, RDMO.
								LAT: 39.96095 LONG: 109.41438

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>																														
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> U-01197-A-ST  <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES																														
<b>1. TYPE OF WELL</b> Water Disposal Well	<b>8. WELL NAME and NUMBER:</b> NBU 347																															
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047337090000																															
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6515 Ext	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES																														
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1697 FSL 0411 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 11 Township: 10.0S Range: 22.0E Meridian: S	<b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH																															
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA																																
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>																															
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 9/28/2011  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top; padding: 2px;"><input type="checkbox"/> ACIDIZE</td> <td style="width: 33%; vertical-align: top; padding: 2px;"><input type="checkbox"/> ALTER CASING</td> <td style="width: 33%; vertical-align: top; padding: 2px;"><input type="checkbox"/> CASING REPAIR</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> CHANGE TO PREVIOUS PLANS</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> CHANGE TUBING</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> CHANGE WELL NAME</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> CHANGE WELL STATUS</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> CONVERT WELL TYPE</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> DEEPEN</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> FRACTURE TREAT</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> NEW CONSTRUCTION</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> OPERATOR CHANGE</td> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> PLUG AND ABANDON</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> PLUG BACK</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> PRODUCTION START OR RESUME</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> RECLAMATION OF WELL SITE</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> REPERFORATE CURRENT FORMATION</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> SIDETRACK TO REPAIR WELL</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> TEMPORARY ABANDON</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> TUBING REPAIR</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> VENT OR FLARE</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> WATER DISPOSAL</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> WATER SHUTOFF</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> SI TA STATUS EXTENSION</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> APD EXTENSION</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> WILDCAT WELL DETERMINATION</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> OTHER</td> <td style="vertical-align: top; padding: 2px;">OTHER: <input style="width: 100px;" type="text"/></td> </tr> </table>		<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> OPERATOR CHANGE	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>
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12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <p style="text-align: center;">The operator has concluded the plug and abandonment operations on the subject well on 09/28/2011. This well is now plugged and abandoned. Please see the attached chronological well history.</p> <div style="text-align: right; font-weight: bold; font-size: 1.2em;"> <p>Accepted by the              Utah Division of              Oil, Gas and Mining  <b>FOR RECORD ONLY</b></p> </div>																																
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst																														
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/30/2011																															

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 347 SWD		Spud Date: 9/7/2001						
Project: UTAH-UINTAH			Site: NBU 347 SWD				Rig Name No: LEED 698/698	
Event: ABANDONMENT			Start Date: 9/26/2011			End Date: 9/28/2011		
Active Datum: GL @5,128.00ft (above Mean Sea Level)				UWI: NBU 347 SWD				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/26/2011	7:00 - 7:30	0.50	ALL	48		P		HSM, REVIEW RIGGING UP.
	7:30 - 9:00	1.50	ALL	30	A	P		MIRU.
	9:00 - 11:30	2.50	ALL	47	A	P		ALL BOLTS ON WELL HEAD FLANGE RUSTED UP, TBG FLOWING TO F.B. TNK.
	11:30 - 13:00	1.50	ALL	35	F	P		RU DELSCO WIRELINE, RIH & SET TBG PLUG , POOH, RD DELSCO WIRELINE.
	13:00 - 18:00	5.00	ALL	45	A			ND WH, NU BOP'S, RU FLOOR & TBG EQUIPMENT, UNSET PKR, RU SCAN TECH, POOH INSPECTING 151 JTS. J-55 TBG, LD 7JTS. WALL LOSS, RD SCAN TECH, SWI, SDFN.
9/27/2011	7:00 - 7:30	0.50	ALL	48		P		HSM, RIH W/ CICR
	7:30 - 9:30	2.00	ALL	46	E	S		WELL FLOWING, RU DELSCO, INSTALL TBG PLUG
	9:30 - 13:30	4.00	ALL	31	I	P		PU 4-1/2 CICR & RIH 153 JTS. 2-3/8 J-55 TBG, SET CICR @ 4744', RU DELSCO, RIH TO RETRIEVE TBG PLUG, RD DELSCO,
	13:30 - 14:15	0.75	ALL	51	A	P		PLG #2) RU PRO PETRO, P.T. LINES 2000 PSI. EST INJ RATE @ 650 PSI. @ 2.0 BPM, PUMP 2.0 BBLS FRESH WTR, 6.1 BBLS (25 SKS) CLASS "G" CMT, 1 BBL FRESH WTR, & DISP W/ 16.35 BBLS, STING OUT OF CICR & SPOT 1 BBL CMT ON TOP OF CICR, RD PRO PETRO.
	14:15 - 16:45	2.50	ALL	31	I	P		POOH & LD 19 JTS. ON TRAILER, POOH 135 JTS.TBG, PU CIBP & RIH 135 JTS. TBG & SET CIBP @ 4193'.
	16:45 - 17:30	0.75	ALL	51	C	P		PLG #3) RU PRO PETRO, FILL CSG, PUMP 2.6 BBLS FRESH WTR, 2.45 BBLS (12 SKS) CLASS "G" CMT, 1 BBL FRESH WTR, & DISP W/ 14.5 BBLS. RD PRO PETRO.
9/28/2011	17:30 - 19:00	1.50	ALL	31	I	P		POOH & LD 48 JTS. 2-3/8 J-55 TBG ON TRAILER, POOH 86 JTS. SWI, SDFN.
	7:00 - 7:15	0.25	ALL	48		P		HSM, REVIEW SETTING CIBP.
	7:15 - 8:00	0.75	ALL	34	I	P		RU J-W WIRELINE SERVICES, RIH W/ 4-1/2 CIBP & SET @ 2700', POOH, RD J-W WIRELINE SERVICES.
	8:00 - 9:00	1.00	ALL	31	I	P		RIH 86 JTS. TAG CIBP @ 2700' PU TBG OFF PLUG 5'
	9:00 - 9:30	0.50	ALL	51	D	P		PLG #3A) RU PRO PETRO, FILL HOLE W/ 5 BBLS, PUMP 2.6 BBLS FRESH WTR, 3.1 BBLS (16 SKS) CLASS "G" CMT, 1 BBL FRESH WTR, DISP W/ 8.5 BBLS. RD PRO PETRO.
	9:30 - 12:15	2.75	ALL	31	I	P		POOH LD 52 JTS, 2-3/8 J-55 TBG ON TRAILER, POOH REMAINING TBG, DUG SURFACE CSG VALUE CELLAR W/ BACK-HOE TO HOOK-UP LINE TO PIT TO CIRC CMT.
	12:15 - 12:45	0.50	ALL	34	H	P		RU J-W WIRELINE SERVICES, RIH & PERFORATED CSG @ 1155', W/ 3" CSG GUN, 4 SPF, POOH, RD J-W WIRELINE SERVICES.
12:45 - 13:30	0.75	ALL	31	I	P		PU 4-1/2 CICR & RIH 35 JTS.TBG, SET CICR @ 1105'	

US ROCKIES REGION  
**Operation Summary Report**

Well: NBU 347 SWD

Spud Date: 9/7/2001

Project: UTAH-UINTAH

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Rig Name No: LEED 698/698

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