

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

FORM 3

AMENDED REPORT   
 (highlight changes)

001

<b>APPLICATION FOR PERMIT TO DRILL</b>		5. MINERAL LEASE NO: Fee	6. SURFACE: Fee
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>		7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		8. UNIT or CA AGREEMENT NAME: N/A	
2. NAME OF OPERATOR: Legend Energy of Utah		9. WELL NAME and NUMBER: Carroll #1	
3. ADDRESS OF OPERATOR: P.O. Box 231 CITY Glendale STATE UT ZIP 84729		PHONE NUMBER: (435) 648-2647	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 2,057' FSL 1,902' FEL 4135878Y 37.36 045 AT PROPOSED PRODUCING ZONE: Same 358329X -112.54973		10. FIELD AND POOL, OR WILDCAT: Wildcat	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 2.25miles north from Glendale, Utah		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 40S 7W	
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 1,902'		16. NUMBER OF ACRES IN LEASE: 7,755	
17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40		18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) N/A	
19. PROPOSED DEPTH: 2,200		20. BOND DESCRIPTION: Blanket State Wide Bond \$80,000	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 6,150 GR		22. APPROXIMATE DATE WORK WILL START: 9/1/2002	
23. ESTIMATED DURATION: 14 days		12. COUNTY: Kane	
13. STATE: UTAH			

**24. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
12 1/4"	8 5/8" K-55 23	240	Class G+2%CaCl2	168 sx	1.18 cf/sx	15.6
			0.25 #/sx Cello Flakes	230 SX	1.20 cf/sx	15.6
7 7/8"	5 1/2" K-55 15.5	2,200	Class G+3%cm+ 50/50 Pz	164 sx	2.87 cf/sx	11.4
			0.25 #/sx Cello Flakes	330 SX	1.48 cf/sx	12.0
7 7/8"	5 1/2" K-55 15.5	2,200	Class G+4% bentonite	34 sx	1.55 cf/sx	11.4
			+0.25 #/sx Cello Flake	110 SX	1.20 cf/sx	15.6
* See Sundry dated 10/26/02						

**25. ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) A. H. Morgan TITLE Manager  
 SIGNATURE A. H. Morgan DATE 8.22-02

(This space for State use only)

API NUMBER ASSIGNED: 43-025-30032

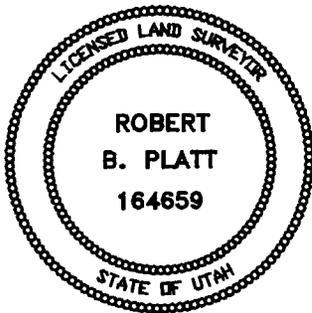
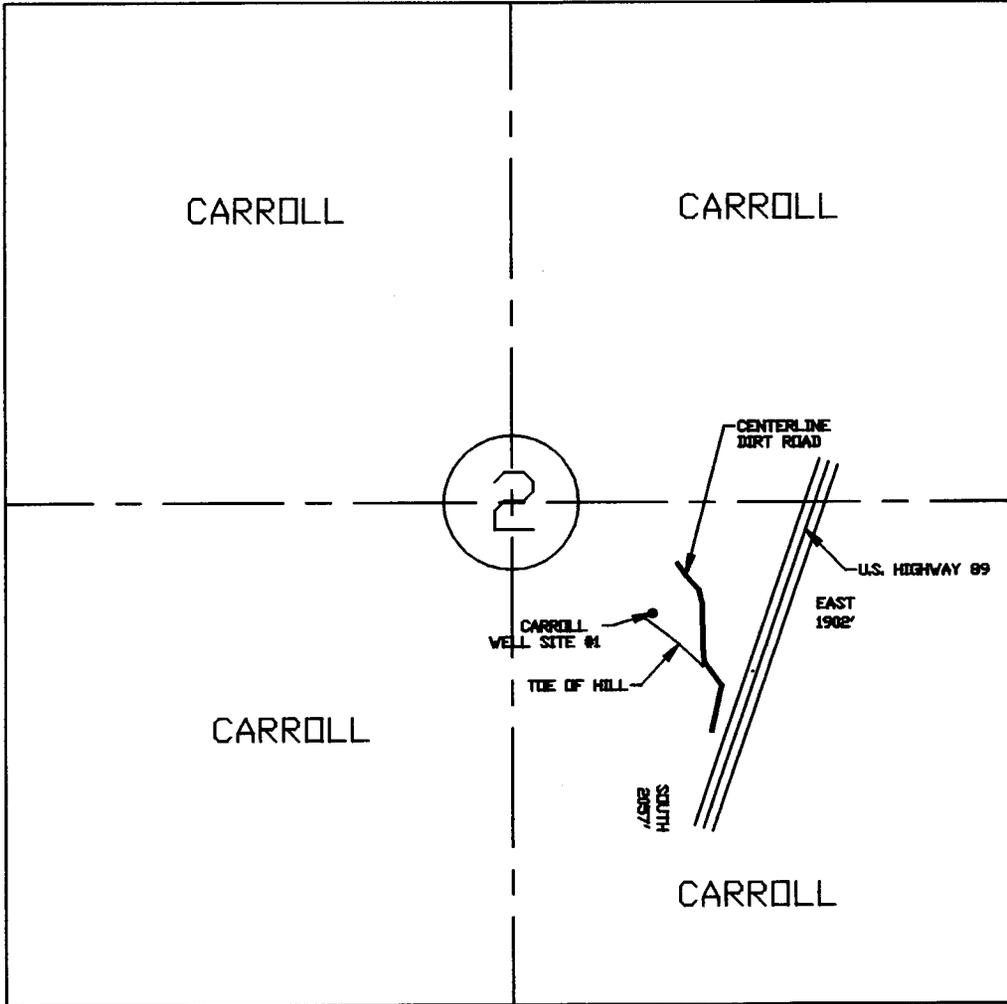
RECEIVED BY THE  
 STATE ENGINEER OF  
 OIL, GAS AND MINING

**RECEIVED**  
 AUG 23 2002  
 DIV OF OIL, GAS & MINING

(11/2001)

(See \_\_\_\_\_ on Reverse Side) 12-02  
[Signature]

SECTION 2, T. 40 S., R. 7 W.,  
S.L.B. & M.



◆ DENOTES LOCATED GLO CORNER  
 T OTHER EXTERIOR CORNER  
 LOCATIONS FIXED BY GLO  
 INFORMATION

DRAWN BY: K.L. NELSON	PROJECT	SHT. NAME	SHT. NO.
DATE: JULY, 2002	LEGEND ENERGY OF UTAH, LLC (LEGEND ENERGY CORP.)	NORMAN H. CARROLL	1
SCALE: 1 INCH = 1000 FEET	NORMAN H. CARROLL WELL SITE	WELL #1	
APPROVED BY: R.B. PLATT	WITHIN SE1/4 SECTION 2, T. 40 S., R. 7 W., S.L.B. & M.		

**EARTH & STRUCTURE, INC.**  
800 S. Vermillion Dr.  
Kanab, Utah 84741  
435-644-3125 435-689-0559

August 22, 2002

**VIA Federal Express**

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

**RECEIVED**

AUG 23 2002

DIVISION OF  
OIL, GAS AND MINING

***Re: Submittal of Amended Application for Permit to Drill Pugh #8 Disposal Well  
and Two New Drill Applications for Permit to Drill the Carroll #1 and Debrach  
LLC #1 Wells***

Dear Mr. Hebertson:

Enclosed herewith, please find two (2) copies of the amended application for permit to drill (APD's) for Pugh #8 Disposal Well for Legend Energy of Utah, L.L.C. Also, please find two new APD's. The new APD's are for the following wells:

Carroll #1, to be drilled on the Norman Carroll Lease Block

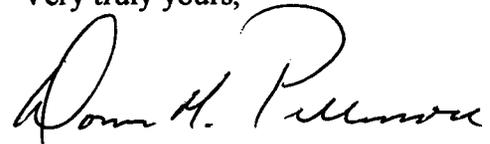
Debrach LLC #1, to be drilled on the L. Derral Christensen Lease Block

The amended APD only includes two copies of the Application for Permit to Drill, Form 3. The only change being made on the amended application is a new cementing program, as requested by Utah Division of Oil, Gas, and Mining, which has been changed on the submitted form. The new APD's include all required data including a map showing their

location in the Lease Block and the surrounding surface property ownership. Note that due to an excessively dry year water is not available from Carroll or Christensen, therefore, as noted in the text of the application, water will be purchased from the town of Alton or from a local rancher in the Alton area.

If you have any questions or require additional information please feel free to contact me at 435-689-0559 or A. H. Morgan, Manager of Legend Energy of Utah, at 435-648-2647.

Very truly yours,



Donn M. Pillmore

President

cc: A. H. Morgan, Manager

AUG 13 2002

DIVISION OF  
OIL, GAS AND MINING

***Drilling Program***

Well planned for the Carroll Lease Kane County, Utah

<b>Depths</b>			
<b>Important Geological Markers</b>	<b>Estimated Depth in Feet</b>	<b>Estimated Top &amp; Bottom Depths of Mineral-Bearing Formations</b>	
		Water	surface - 200 ft.
Kaiparowits	600	Oil	None
Straight Cliffs	800	Gas	Dakota Formation:
John Henry	900		Smirl: 1,800'-1,820'
Tropic Shale	1,400		Bald Knoll: 2,185'-2,200'
Top Dakota	1,700	Other	None
Smirl	1,800		
Bottom Bald Knoll	2,200		

**Notable Zones**

Gas is expected in the Smirl coal seam (1,800' – 1,820') and the Bald Knoll coal seam (2,185' – 2,200'). No other oil or gas zones are expected. The Smirl and Bald Knoll coal seams are anticipated water zones.

**Pressure Control**

An approximate 10" x 2,000 psi double ram BOP with 2,000 psi choke manifold will be used from bottom of surface casing to TD. (A typical 2,000 psi BOP is shown on page 3. Actual model will not be known until the drilling bid has been let). The BOP system will be tested to 70% of the minimum internal yield before drilling the surface casing shoe.

System will be tested at least once every 30 days. Tests will be recorded in the driller's log. BOPs will be inspected and operated daily to assure good mechanical working order.

<b>Casing and Cementing</b>						
Hole Size	O.D.	Weight	Grade	Type	Age	~Setting depth
12 1/4"	8 5/8"	23	K-55	ST&C	Tested to New Specs	240'
7 7/8"	5 1/2"	15.5	K-55	ST&C	Tested to New Specs	2,200'

Surface casing will be circulated to surface with 168 sacks Class G cement + 2% CaCl<sub>2</sub> + .25#/sx Cello Flakes. Weight = 15.6 ppg. Yield = 1.18 cubic feet per sack. Excess = 100%. If lost circulation is encountered, then the cement may be changed to a 50 - 50 poz mix to lighten the slurry to 13.3 ppg to allow the cement to be circulated to the surface.

Long string will be cemented to surface with 164 sacks Class G cement + 3% sm + 0.25 #/sx Cello Flakes. Weight = 11.4 ppg. Yield = 2.87 cubic feet per sack. If lost circulation is encountered, then the cement may be changed to a 50 - 50 poz mix to lighten the slurry to 13.3 ppg to allow the cement to be circulated to the surface. This cement will be tailed in with Class G cement + 4% bentonite + 0.25 #/sx Cello Flakes. Excess = 50% in open hole, 0% in cased hole.

Amended by Sundry Dated 6/26/02 DED

## **Mud Program**

Surface hole will be drilled with mud. Water used in the mix will be produced from this well and augmented as needed from water from the town of Alton or from a local rancher. Expected mud weight will be 8.6 – 9.2 pounds per gallon. Expected viscosity = 35 to 45. No fluid loss control will be used.

The remainder of the hole will be drilled to TD with mud as described above.

## **Data Gathering**

The first deviation survey will be run ~ 240' below the BSC. Additional surveys will be run every 300' to TD. The hole deviation limit will be 1° per 100' of hole and a maximum of 6° at TD. If the deviation of the hole exceeds 4°, the driller will decrease the WOB, and increase RPM, and survey at 200' intervals until corrected. If the deviation of the hole becomes severe (>5%), the driller may use a fourth stabilizer and convert to a full packed BHA.

Mud loggers will be onsite from ~ 1,000' to TD. They will have full chromatograph capabilities. They will collect samples every 30' from 1,000' to 1,400' and every 10' from 1,400' to TD.

The logging company will run the following log suite:

HRI/DSN/SDL/GR (EVR Mode): 200' to TD

HRI/DSN/SLD/GR: BSC to TD

### **Down Hole Conditions**

Maximum anticipated bottom hole pressure is 1,000 psi. No abnormal pressures, temperatures, or hydrogen sulfide are expected.

### **Miscellaneous**

The drill hole will be spudded upon approval and the availability of a drill rig. Under normal operating conditions, it will take approximately 1 week to drill the well and approximately 1 week to complete the well.

Kane County Hospital is located at 220 West 300 North in Kanab, Utah. The phone number is 435-644-5811.

### ***Surface Use Plan***

#### **Existing Roads & Directions**

Take Highway 89 from Glendale, Utah north approximately 2.25 miles to the turn off to the drill site pad. The pad is located on the west side of Highway 89. See map on Exhibit A.

#### **Existing Wells**

There are no existing water, gas, oil, injection, or disposal wells within a mile of the proposed well.

### **Proposed Facilities**

Facilities may include tanks, filters, pumps, equipment shelters, fence, and generators. Future, permanent well facilities will be painted a dark olive green color.

### **Water Supply**

Water for drilling operations will be purchased from the town of Alton or from a local rancher.

### **Waste Disposal**

All trash will be placed in a trash cage or bin. When full, it will be hauled to a state approved landfill. There will be no trash burning or disposal of trash in the reserve pit. Chemical toilets will be used for human waste. The contents will be pumped and disposed of in accordance with Utah State requirements.

### **Ancillary Facilities**

No airstrip or formal camp is planned for this project. Camp trailers may be used on site for the drilling contractor and his crew, the geophysical logging contractor, tool pusher and possibly other contractors.

### **Well Site Layout**

See attached site layout diagram for depictions of well pad, cross sections, cut and fill diagrams, reserve pit, burn pit, access road onto the pad, parking, living facilities, and rig

orientation. The reserve pit will be lined with a minimum 12-mil liner. During use of the reserve pit, a minimum 2-foot freeboard will be maintained at all times.

### **Reclamation**

When drilling, testing, and well completion have been completed, the well site and immediate area will be cleared of all debris and material not required for production of the well.

Reclamation will start and the reserve pit will be closed within one (1) year of well completion. The pit contents shall meet the Utah Division of Oil and Gas cleanup levels or background levels prior to burial. If necessary, appropriate treatment to reduce mobility and/or toxicity in order to meet cleanup levels will be undertaken. The liner will be slashed or punctured, folded into the bottom of the reserve pit and buried in place. A minimum of four (4) feet of cover will be placed on top of the reserve pit. All areas not needed for production equipment or water disposal equipment will be backfilled, re-contoured to approximate the natural contours. The reserved topsoil and brush will be spread over the reclaimed site. If the well is production well, the area required for the production equipment and water disposal equipment will not be reclaimed. A sufficient quantity of topsoil will be set aside for reclamation of the remainder of the pad at the end of the producing life of the well. Disturbed areas will be scarified along contour prior to seeding. All reclaimed areas will be broadcast weeded in late fall or winter with seed mixes specified by the surface owner. Seeded areas will be left rough and lightly harrowed or dragged with a chain after seeding. Silt fence will be maintained until the re-vegetation is successful.

**Legend Energy of Utah, L.L.C.**  
**Carroll # 1**  
**2,057 FNL & 1,902 FWL FEL**  
**Sec. 2, T. 40 S., R. 7 W.**  
**Kane County, Utah**

**Surface Owner**

The surface owner is:

Norman H. Carroll and Barbara Carroll  
91 W. 100 S.  
Orderville, Ut 84758  
(435)648-2219

**Representation**

Anyone having questions concerning the APD should contact:

Donn M. Pillmore, President  
Earth & Structure, Inc  
800 S. Vermillion Dr.  
Kanab, Utah 84741

435-644-3125 Phone & Fax  
435-689-0559 Cell

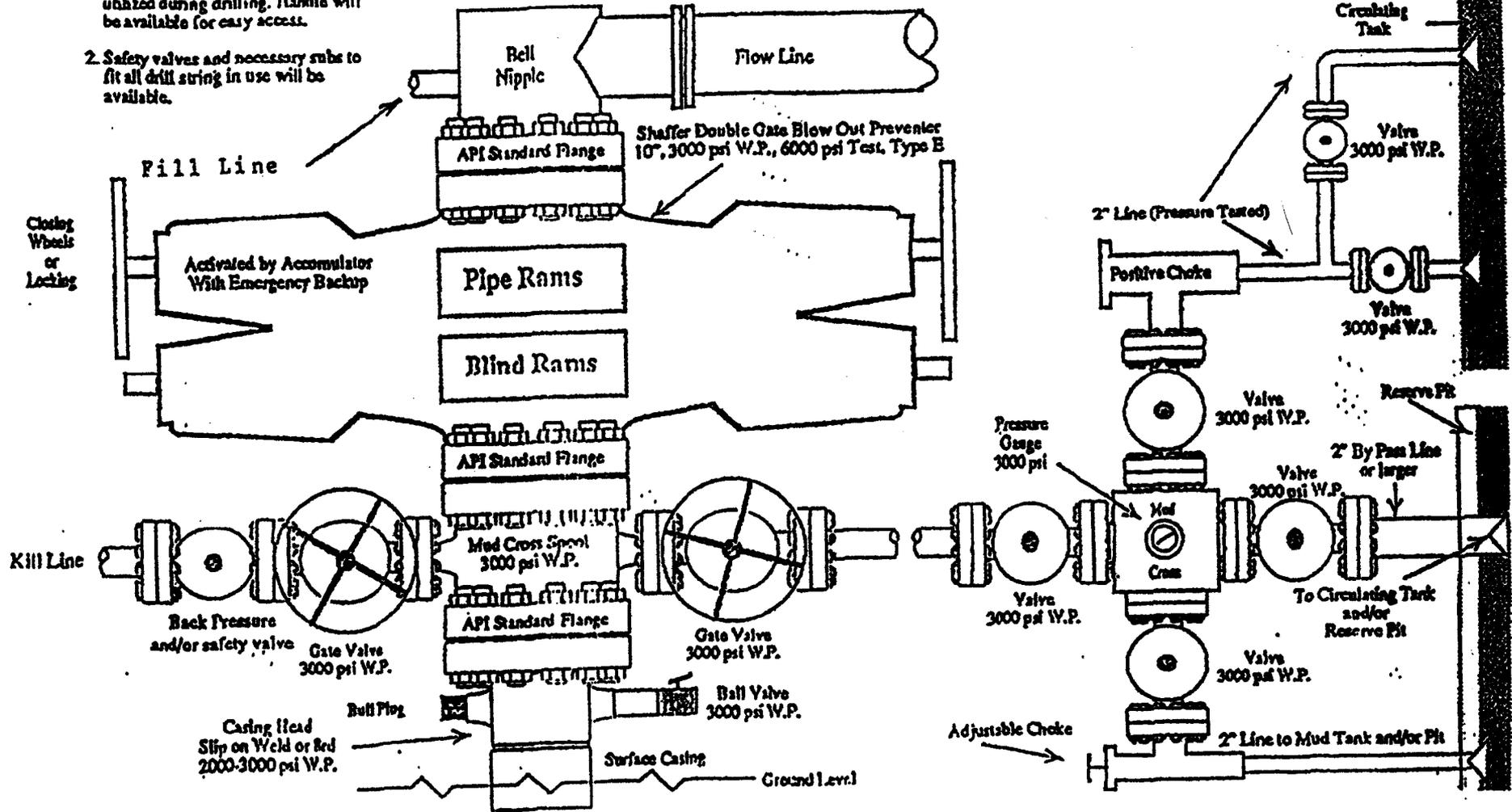
The field representative will be:

A. H. Morgan  
15 North 200 East  
P.O. Box 231  
Alton, Utah 84710  
435-648-2647

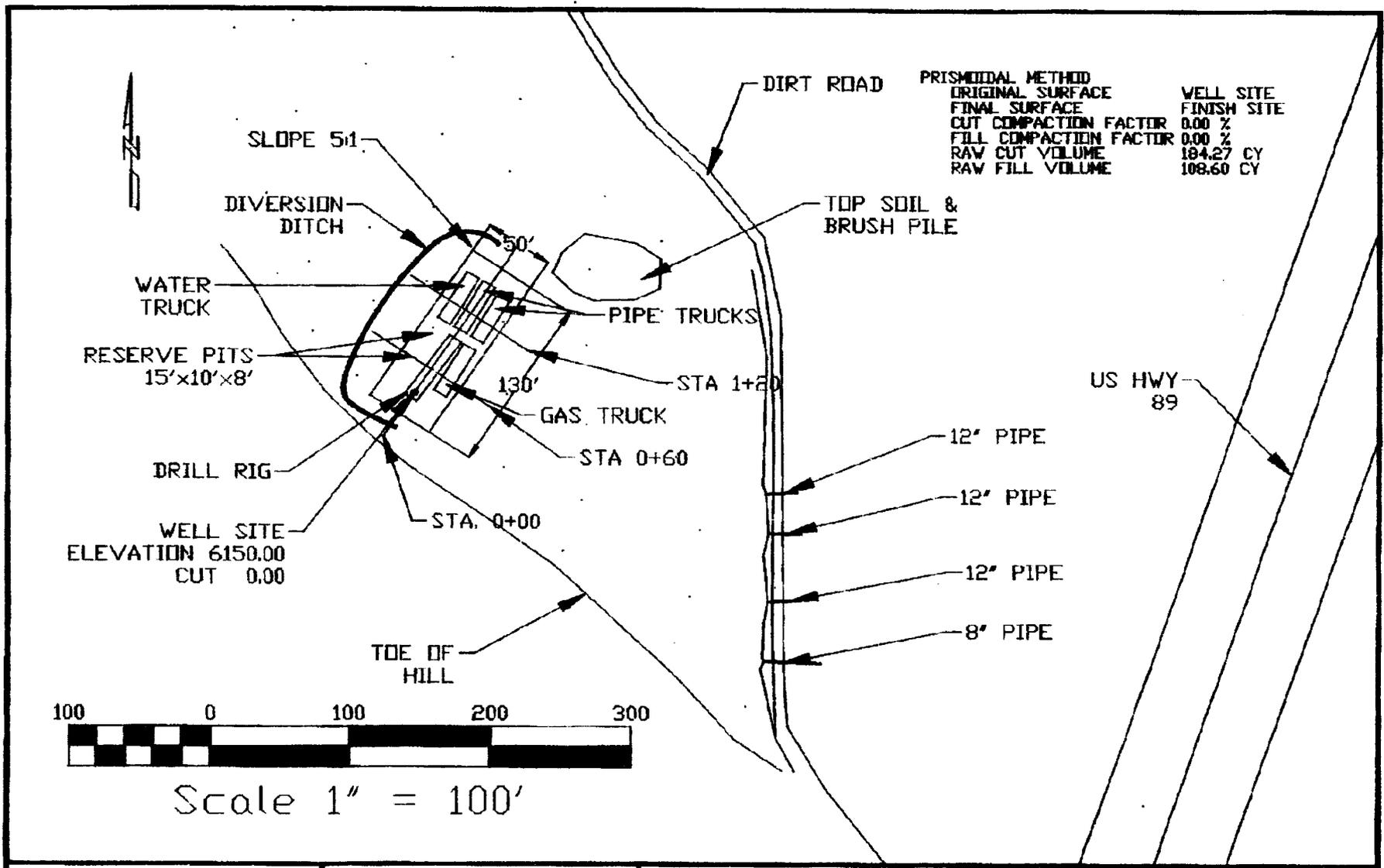
Pressure Control Equipment

- Note: 1. An upper Kelly cock valve will be utilized during drilling. Handles will be available for easy access.
2. Safety valves and necessary subs to fit all drill string in use will be available.

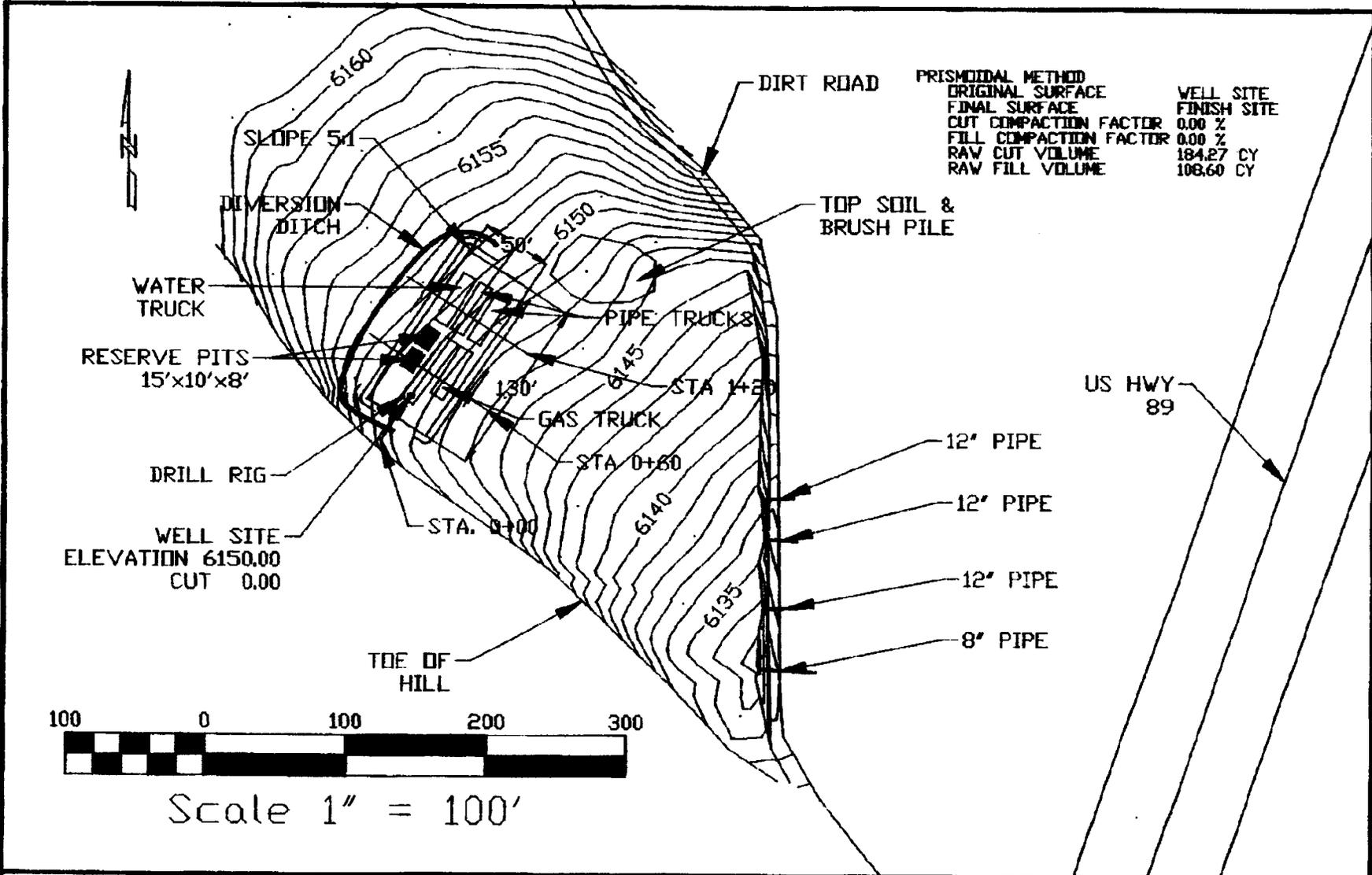
Minimum 2" Choke Line.  
Minimum 2" Kill Line.  
At Least One 2" Minimum Kill Line Valve.



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

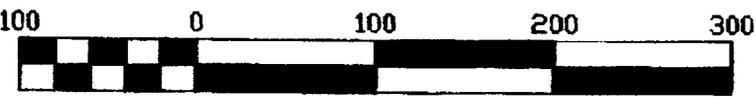


DRAWN BY: K.L. NELSON	REVISIONS	PROJECT	SHT. NAME	SHT. NO.
DATE: AUG, 2002		LEGEND ENERGY OF UTAH, LLC (LEGEND ENERGY CORP.) NORMAN H. CARROLL WELL SITE	NORMAN H. CARROLL WELL #1	
DWG. NO.:	SCALE: 1 INCH = 100 FEET	WITHIN SE1/4 SECTION 2, T. 40 S. R. 7 W. S.L.B. & M.		
APPROVED BY: R.B. PLATT				



PRISMOIDAL METHOD	WELL SITE
ORIGINAL SURFACE	FINISH SITE
FINAL SURFACE	0.00 %
CUT COMPACTION FACTOR	0.00 %
FILL COMPACTION FACTOR	184.27 CY
RAW CUT VOLUME	108.60 CY
RAW FILL VOLUME	

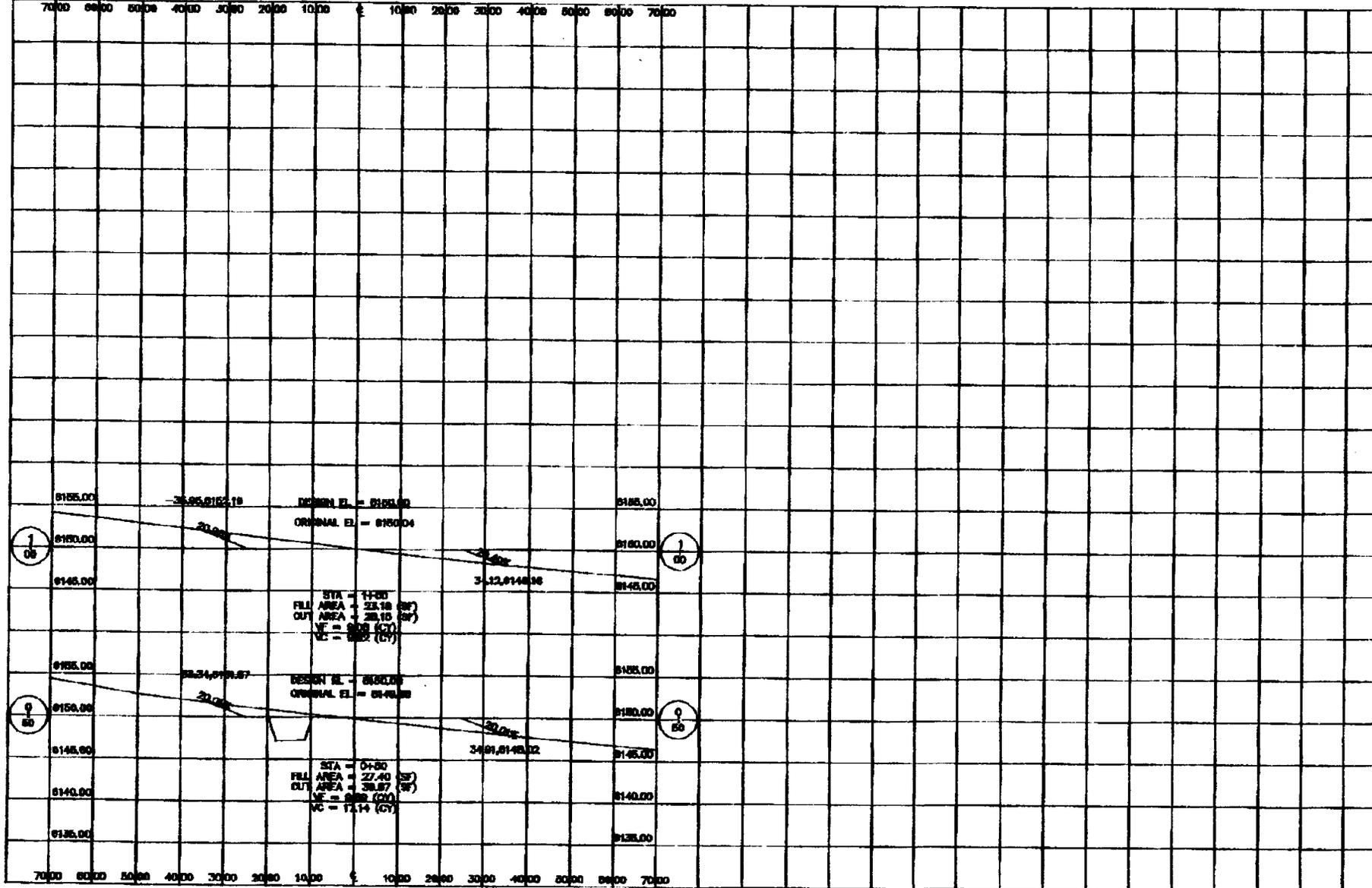
WELL SITE  
ELEVATION 6150.00  
CUT 0.00



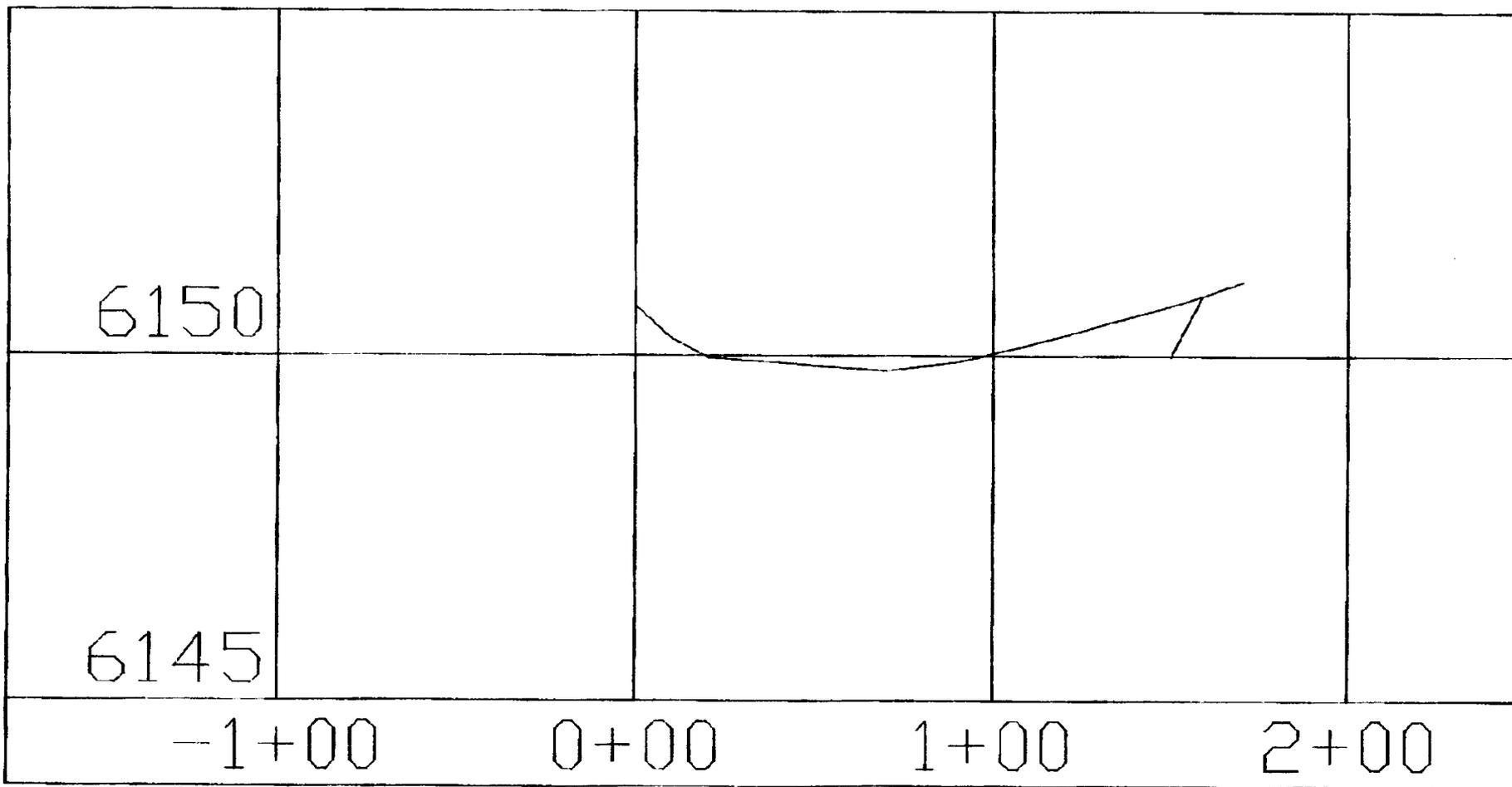
Scale 1" = 100'

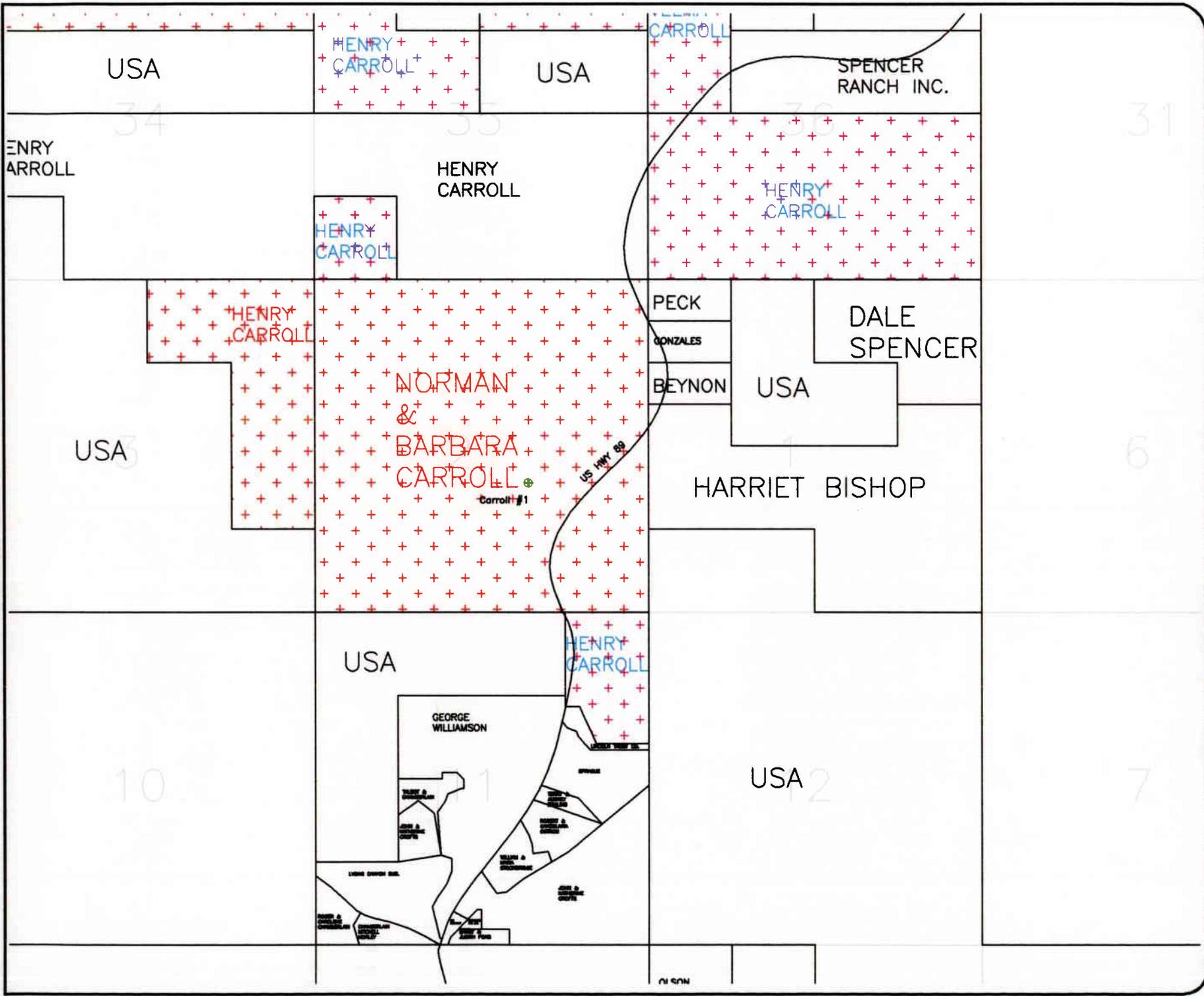
DRAWN BY: K.L. NELSON DATE: AUG, 2002 DWG NO.: APPROVED BY: R.B. PLATT	REVISIONS  SCALE: 1 INCH = 100 FEET	PROJECT LEGEND ENERGY OF UTAH, LLC (LEGEND ENERGY CORP) NORMAN H. CARROLL WELL SITE WITHIN SE1/4 SECTION 2, T. 40 S., R. 7 W., S.L.B. & M.	SHT. NAME NORMAN H. CARROLL WELL #1	SHT. NO.
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# CARROLL WELL #1



Carroll Well # 1






LEGEND ENERGY OF UTAH, L.L.C.  
 CARROLL LEASE  
 ALTON, UT  
 SCALE: 1" = 2000'

EARTH & STRUCTURE,  
 INC  
 DAWN M. FILLMORE, P.G.  
 800 S. VERMILION DR., KANAB, UTAH  
 84741  
 (435) 644-3125 (435) 649-0529

DATE:	AUG 2002
FILE:	PUGH
SHEET:	1 OF 1
DRAWN BY:	D. FILLMORE

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

FORM 48

Case No. \_\_\_\_\_

COLLATERAL BOND

KNOW ALL MEN BY THESE PRESENTS:

That we (operator name) Legend Energy of Utah LLC as Principal,  
which is duly authorized and qualified to do business in the State of Utah, are held and firmly bound unto the State of Utah in the sum of:  
Eighty Thousand Dollars value @ 80,000.00/yr  
legal tender of the United States by virtue of the following financial instruments (cash account, negotiable bonds of the United States, a state or municipality, or negotiable certificate of deposit - see Rule 6040-3-1):

payable to the Director of the Division of Oil, Gas and Mining, as agent of the State of Utah, for the use and benefit of the State of Utah for the  
full payment of which we bind ourselves, our heirs, executors, administrators and assigns, jointly and severally by these presents.

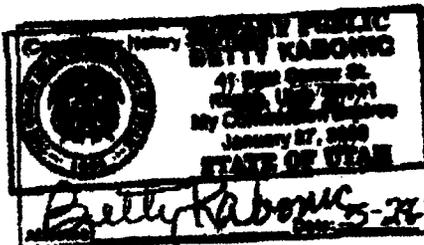
THE CONDITION OF THIS OBLIGATION IS SUCH THAT, WHEREAS the Principal is or will be engaged in the drilling, re-drilling, deepening,  
re-plugging, operating, and plugging and abandonment of a well or wells and restoring the well site or sites in the State of Utah for the purpose of  
oil or gas production; and for the location and disposal of holes in connection therewith for the following described land or well:

- Blanket Bond: To cover all wells drilled in the State of Utah
- Individual Bond: Well No: \_\_\_\_\_  
Section: \_\_\_\_\_ Township: \_\_\_\_\_ Range: \_\_\_\_\_  
County: \_\_\_\_\_ Utah

NOW, THEREFORE, if the above named Principal shall comply with all the provisions of the laws of the State of Utah and the rules, orders and  
requirements of the Board of Oil, Gas and Mining of the State of Utah, including, but not limited to the proper plugging and abandonment of wells  
and well-site restoration, then this obligation is void otherwise, the same shall be and remain in full force and effect.

IN TESTIMONY WHEREOF, said Principal has hereto subscribed its name and has caused this instrument to be signed by its duly authorized  
officer and its corporate or notary seal to be affixed this

28 day of May, 2002



Legend Energy of Utah LLC  
Principal (company name)  
By A. HARRIMAN MORGAN - Manager  
Name (Title)  
A. H. Morgan  
Signature

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

FORM 3

AMENDED REPORT   
 (highlight changes)

APPLICATION FOR PERMIT TO DRILL				5. MINERAL LEASE NO: Fee	6. SURFACE: Fee
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B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME: N/A	
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3. ADDRESS OF OPERATOR: P.O. Box 231 CITY Glendale STATE UT ZIP 84729			PHONE NUMBER: (435) 648-2647	10. FIELD AND POOL, OR WILDCAT: Wildcat	
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7 7/8"	5 1/2" K-55 15.5	2,200	Class G+3%sm+ 164 sx 2.87 cf/sx 11.4 0.25 #/sx Cello Flakes
7 7/8"	5 1/2" K-55 15.5	2,200	Class G+4% bentonite 34 sx 1.55 cf/sx 14.1 +0.25 #/sx Cello Flake:

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

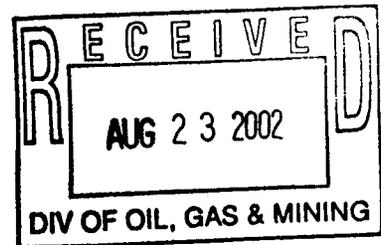
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) A. H. Morgan TITLE Manager  
 SIGNATURE A. H. Morgan DATE 8.22-02

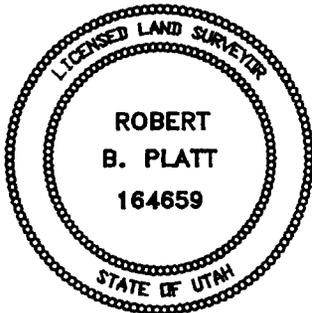
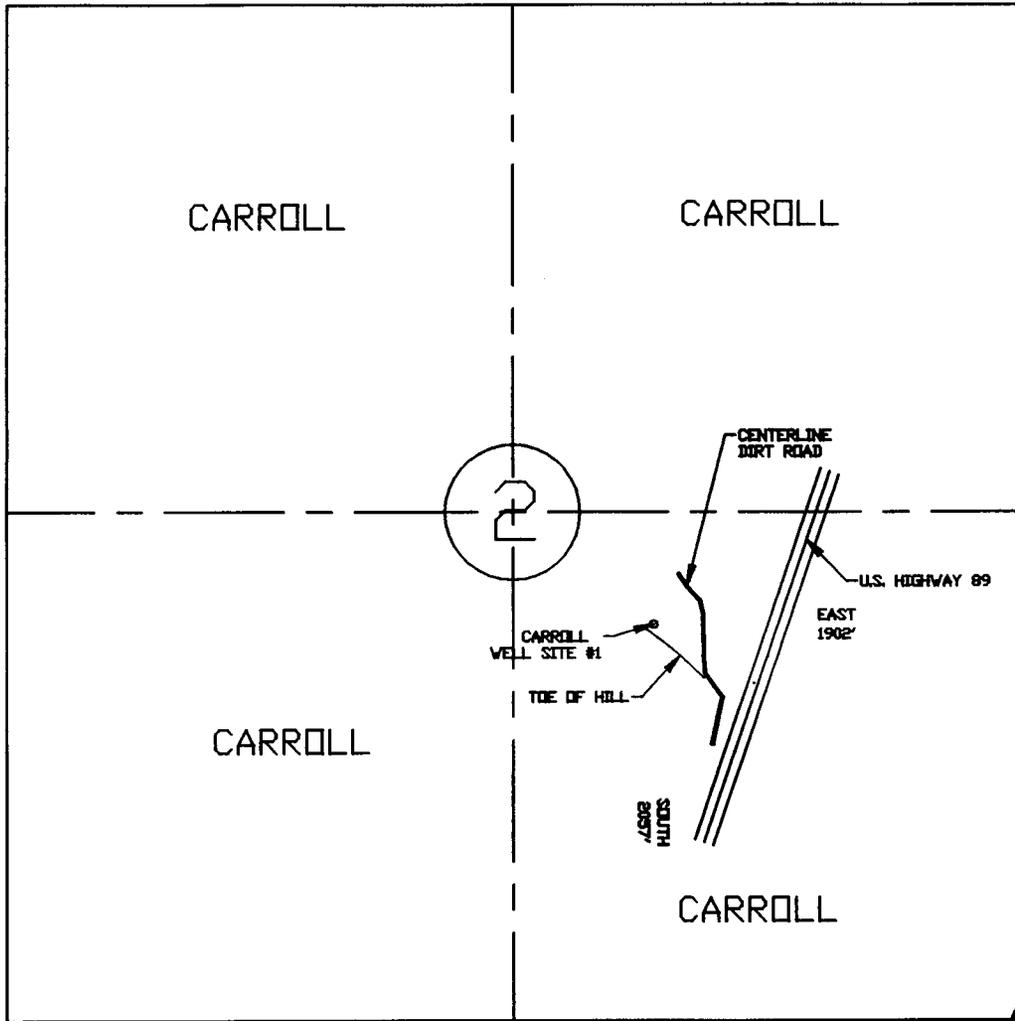
(This space for State use only)

API NUMBER ASSIGNED: 43-025-30032

APPROVAL:

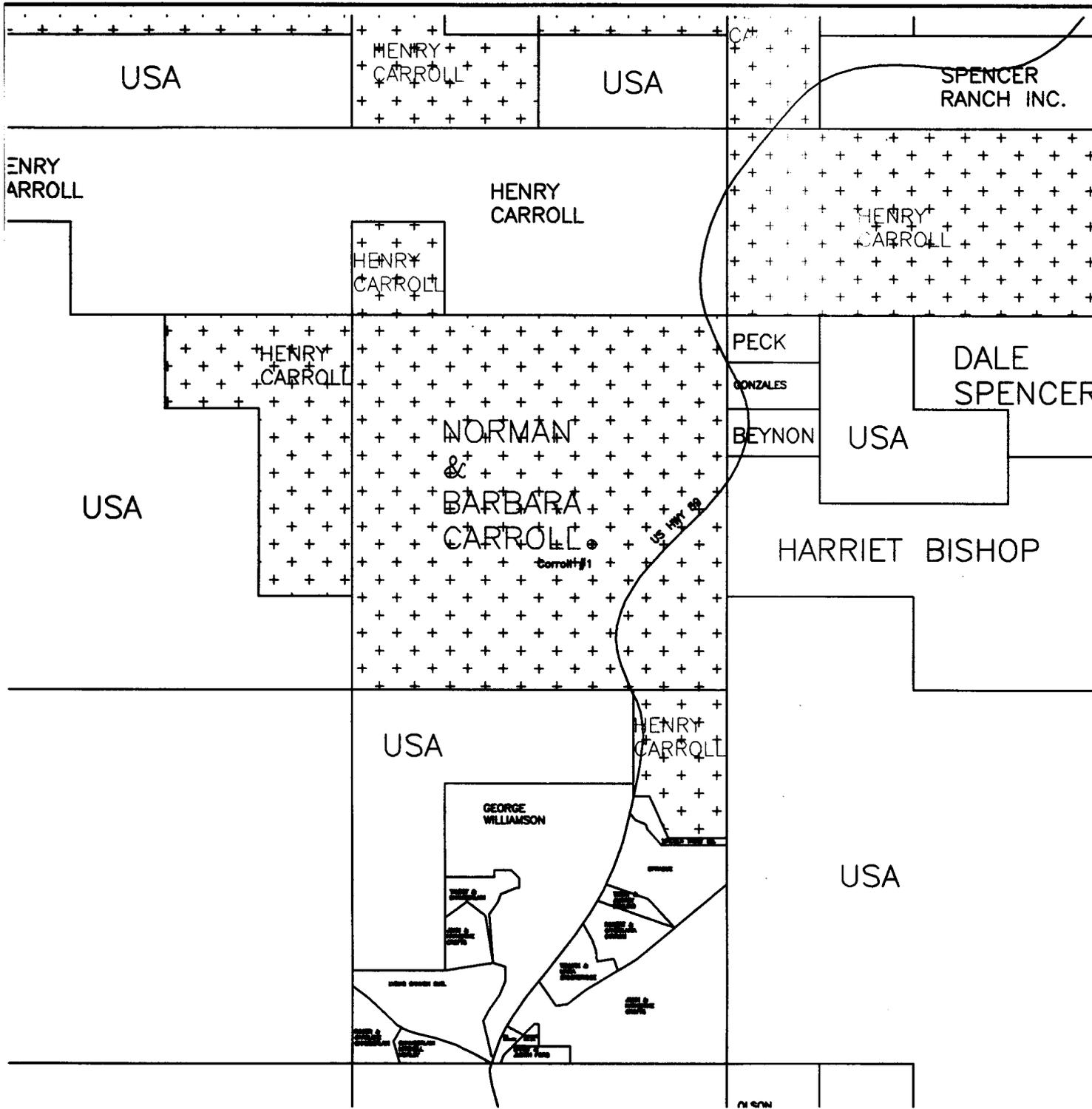


SECTION 2, T. 40 S., R. 7 W.,  
S.L.B. & M.



◆ DENOTES LOCATED GLO CORNER  
 T OTHER EXTERIOR CORNER  
 LOCATIONS FIXED BY GLO  
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DRAWN BY: K.L. NELSON	PROJECT	SHT. NAME	SHT. NO.
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SCALE: 1 INCH = 1000 FEET	WITHIN SE1/4 SECTION 2, T. 40 S., R. 7 W., S.L.B. & M.		
APPROVED BY: R.B. PLATT			




LEGEND ENERGY OF UTAH, L.L.C.  
 CARROLL LEASE  
 ALTON, UT  
 SCALE: 1" = 2000'

EARTH & STRUCTURE,  
 INC  
 DONN M. FILLMORE, P.G.  
 800 S. VERMILION DR., KANAB, UTAH  
 84741  
 (435) 844-3126 (435) 849-0259

DATE: AUG 2002  
 SHEET: 1 OF 1  
 FILE: PUGH  
 DRAWN BY: D. FILLMORE

006

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/23/2002

API NO. ASSIGNED: 43-025-30032

WELL NAME: CARROLL 1

OPERATOR: LEGEND ENERGY OF UTAH ( N1890 )

CONTACT: A.H. MORGAN

PHONE NUMBER: 435-648-2647

PROPOSED LOCATION:

NWSE 02 400S 070W  
SURFACE: 2057 FSL 1902 FEL  
BOTTOM: 2057 FSL 1902 FEL  
KANE  
WILDCAT ( 1 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DRD	10/28/02
Geology		
Surface		

LEASE TYPE: 4 - Fee

LEASE NUMBER: FEE

SURFACE OWNER: 4 - Fee

LATITUDE: 37.36065

PROPOSED FORMATION: DKTA

LONGITUDE: 112.59973

RECEIVED AND/OR REVIEWED:

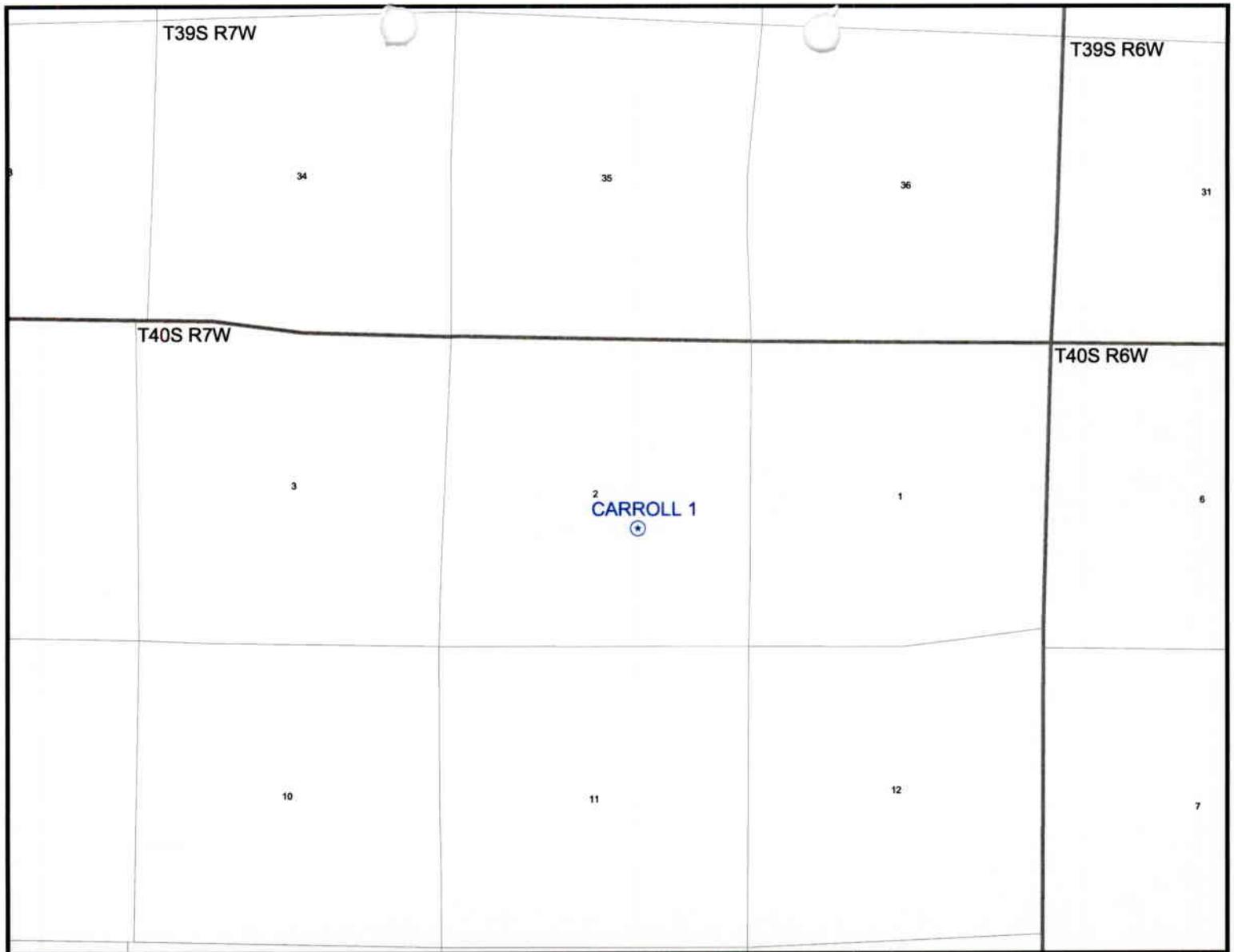
- Plat
- Bond: Fed[] Ind[] Sta[] Fee[4]  
(No. 052-935294-0 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. A22746 )
- RDCC Review (Y/N)  
(Date: 09/10/2002 )
- Fee Surf Agreement (Y/N)

LOCATION AND SITING:

- R649-2-3.
- Unit \_\_\_\_\_
- R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- R649-3-3. Exception
- Drilling Unit  
Board Cause No: \_\_\_\_\_  
Eff Date: \_\_\_\_\_  
Siting: \_\_\_\_\_
- R649-3-11. Directional Drill

COMMENTS: Need Permit (9-23-02) <sup>Recd</sup>

STIPULATIONS: 1- Spacing Slip  
2- STATEMENT OF BASIS

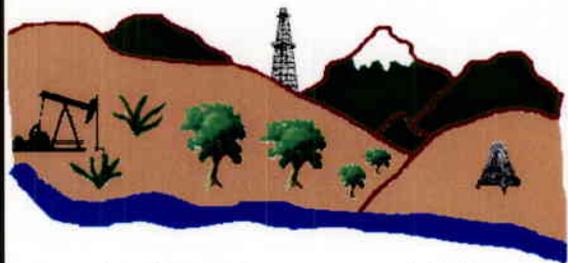


OPERATOR: LEGEND ENERGY (N1890)

SEC: 2 T40S R7W

FIELD: WILDCAT (001)

COUNTY: KANE SPACING: 649-3-2



Utah Oil Gas and Mining

**Well Status**

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

**Units Status**

- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

**Field Status**

- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED
- Sections.shp
- Township.shp
- Counties.shp



Prepared By: D. Mason  
Date: 26-AUGUST-2002

MEMORANDUM

DATE: September 4, 2002  
TO: Utah Division of Oil, Gas and Mining  
CC: Resource Development Coordinating Committee  
FROM: Utah Geological Survey, Environmental Sciences Program  
SUBJECT: UGS comments on RDCC short turn around item 2133

**2133. Short Turn Around Drilling Permits**

SLB&M Location: Sec. 2, T40S, R7W; Sec 22, T38S, R6W, Kane County

Application for Permit to Drill - proposal to drill a wildcat well, the Carroll #1 and Debrach LLC #1 well, on Fee leases.

Although there are no paleontological localities recorded in this project area, surficial deposits on the Carroll #1 well site (Sec. 2, 40S, 7W) are comprised of the Late Cretaceous Wahweap Formation, which has the potential for yielding significant vertebrate fossil localities. A paleontological survey of this project is therefore recommended.

# Five County Association of Governments

906 North 1400 West  
St. George, Utah 84770

Fax (435) 673-3540

RECEIVED

SEP 16 2002



Post Office Box 1550  
St. George, Utah 84771

Office (435) 673-3548

DIVISION OF OIL, GAS AND MINING  
SOUTHWEST UTAH  
AREA WIDE CLEARINGHOUSE A-95 REVIEW

Type of Action: Pre-Application \_\_\_\_\_ Notification of Intent  X  Application \_\_\_\_\_  
Notice of Federal Action \_\_\_\_\_

Receipt Date  08/30/02  SAI Number \_\_\_\_\_ ACH Number \_\_\_\_\_

Applicant Identification, Address  
Utah Division Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

Funding:  
Federal N/A  
Supplemental N/A  
State N/A  
Local N/A  
Other N/A

Applicant's Project Title:  
APPLICATION FOR PERMIT TO DRILL TOTAL N/A

Description: Legend Energy of Utah proposes to drill the Carroll #1 and Debrach LLC #1 well (wildcat) on Fee leases, Kane County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.

## AREA WIDE CLEARINGHOUSE COMMENTS ON PROPOSAL FOR FEDERAL AID

Staff review completed (date):  09/04/02

Screening Committee review completed (date)  09/11/02

Executive Board Review Completed (date)

Referred to original for additional information (date)

- Recommend Approval  X  Comments (see reverse side of page)  X
- Conditionally approved as follows (see reverse side of page) \_\_\_\_\_
- Recommend Disapproval \_\_\_\_\_ Comments (see reverse side of page) \_\_\_\_\_
- The project described above ( X ) does ( ) does not conform with the policy or planning of the multijurisdictional area it directly impacts. Additional information ( ) Is ( X ) Is not needed.
- We also serve notice that all requirements of the Project Notification and Review System for this multijurisdictional area have been met. Therefore, attach this letter to your application and forward to the federal funding agency.
- If this project will be a renewal or continuation grant, please submit your application next year to this areawide clearinghouse for re-review 30 days prior to submission to federal funding agency.
- We would anticipate reviewing final project application 30 days prior to submission for funding.

If any Clearinghouse Comments go unresolved, Federal law requires the Applicant to attach a copy of all negative comments to the project application and forward them both to the Federal Funding Agency(ies).

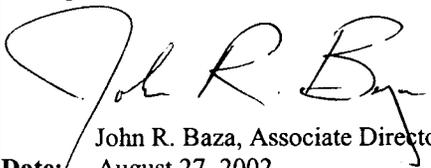
  
\_\_\_\_\_  
Authorizing Official

September 11, 2002

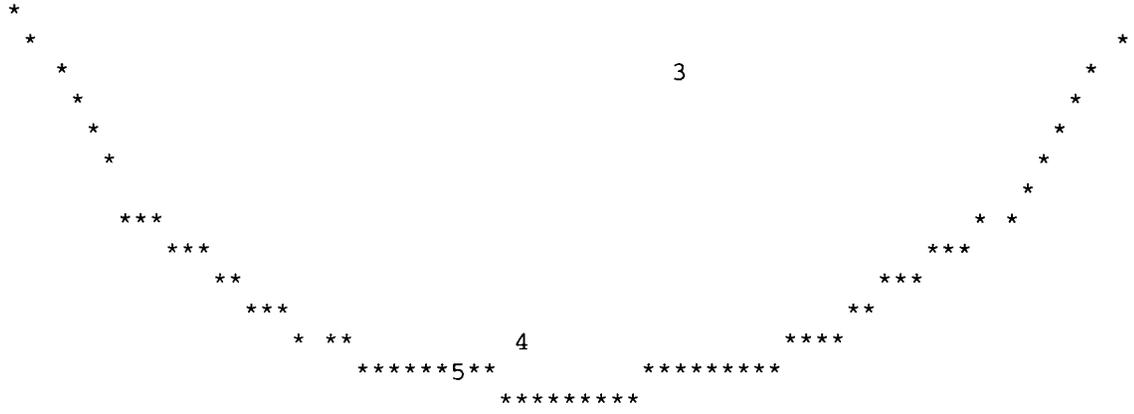
\_\_\_\_\_  
Date

Copy of review sent to applicant

**STATE ACTIONS**  
**State Clearinghouse Coordinator**  
**116 State Capitol, SLC, UT 84114**  
**538-1535**

<b>1. Administering State Agency</b> Oil, Gas and Mining 1594 West North Temple, Suite 1210 Salt Lake City, UT 84114-5801	<b>2. State Application Identifier Number: (assigned by State Clearinghouse)</b>  <b>3. Approximate date project will start:</b> Upon Approval or September 1, 2002
<b>4. Areawide clearinghouse(s) receiving state action: (to be sent out by agency in block 1)</b>  Five County Association of Governments	
<b>5. Type of action:</b> // Lease <input checked="" type="checkbox"/> / Permit // License // Land Acquisition // Land Sale // Land Exchange // Other _____	
<b>6. Title of proposed action:</b>  Application for Permit to Drill	
<b>7. Description:</b>  Legend Energy of Utah proposes to drill the Carroll #1 and Debrach LLC #1 well (wildcat) on Fee leases, Kane County, Utah. This action is being presented to the RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.	
<b>8. Land affected (site location map required) (indicate county)</b>  NW/4, SE/4; Section 2, Township 40 South, Range 7 West and SW/4, SE/4, Section 22, Township 38 South, Range 6 West, Kane County, Utah	
<b>9. Has the local government(s) been contacted?</b> No	
<b>10. Possible significant impacts likely to occur:</b>  Degree of impact is based on the discovery of oil or gas in commercial quantities.	
<b>11. Name and phone of district representative from your agency near project site, if applicable:</b>  	
<b>12. For further information, contact:</b>  Diana Mason Phone: (801) 538-5312	<b>13. Signature and title of authorized officer</b>   John R. Baza, Associate Director Date: August 27, 2002





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	POINT OF DIVERSION DESCRIPTION	U A P T S N P E E U
0	81 2704	.2500	.00	Grassy Canyon Spring Area	S 1090 W 850 N4 2 40S 7W SL	X X
				Carroll, Norman H. & Barbara S.	PO Box 155	UT 84750
						PRIORITY DATE: 00/00/1890
						Orderville
1	81 2705	.1600	.00	East Fork Virgin River (Long V N	N 770 E 350 W4 1 40S 7W SL	X X
				Carroll, Norman H. & Barbara S.		UT 84758
						PRIORITY DATE: 00/00/1890
						Orderville
1	81 2706	.0900	.00	East Fork Virgin River (Long V N	N 770 E 350 W4 1 40S 7W SL	X X
				Carroll, Norman H. & Barbara S.		UT 84758
						PRIORITY DATE: 00/00/1902
						Orderville
2	81 2708	.0110	.00	Cave Spring	S 610 W 1275 E4 2 40S 7W SL	X X
				Carroll, Norman H. & Barbara S.		UT 84758
						PRIORITY DATE: 00/00/1856
						Orderville
3	81 3008	.0600	.00	East Fork Virgin River & Sprin	S 560 W 1000 NE 11 40S 7W SL	X X

		WATER USE(S): IRRIGATION DOMESTIC									PRIORITY DATE: 00/00/1890		
		Ostrom, Robert Neal and Candelaria	P.O. Box 128								Glendale	UT 84729	
3	81 3009	.0163	.00 East Fork Virgin River (Long V S	560	W	1000	NE 11	40S	7W	SL	X	X	
		WATER USE(S): IRRIGATION									PRIORITY DATE: 00/00/1890		
		Behling, Terry L. and Audrey	2309 Maverick Street								Las Vegas	NV 89108	
3	81 2994	.1138	.00 East Fork Virgin River (Long V S	560	W	1000	NE 11	40S	7W	SL	X	X	
		WATER USE(S): IRRIGATION									PRIORITY DATE: 00/00/1890		
		Sprague, Monte M. & Nancy	4728 Ballantine Dr.								Las Vegas	NV 89110	
3	a7054	.0000	.00 Long Valley Creek (East Fork V S	560	W	1000	NE 11	40S	7W	SL	X	X	
		WATER USE(S): IRRIGATION DOMESTIC									PRIORITY DATE: 08/10/1972		
		Cleveland, C.F.	P.O. Box 128								GLENDALE	UT 84729	
4	81 2995	.4480	.00 Chamberlain Springs #1,#2, #3,	N	2450	E	325	S4 11	40S	7W	SL	X	X
		WATER USE(S): IRRIGATION DOMESTIC STOCKWATERING									PRIORITY DATE: 00/00/1890		
		G B W Investments Inc. D.B.P.P.	952 Via Del Monte								Palos Verdes Estate	CA 90274	
4	81 3156	.0120	.00 Chamberlain Spring #1	N	2450	E	325	S4 11	40S	7W	SL	X	X
		WATER USE(S): IRRIGATION									PRIORITY DATE: 00/00/1890		
		Monnett. Jim	1987 Paloma								Washington	UT 84780	
5	81 2995	.4480	.00 Chamberlain Springs #1,#2, #3,	N	2310	W	200	S4 11	40S	7W	SL	X	X
		WATER USE(S): IRRIGATION DOMESTIC STOCKWATERING									PRIORITY DATE: 00/00/1890		
		G B W Investments Inc. D.B.P.P.	952 Via Del Monte								Palos Verdes Estate	CA 90274	

# DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL

STATEMENT OF BASIS

OPERATOR: Legend Energy of Utah

WELL NAME & NUMBER: Carroll #1

API NUMBER: 43-025-30032

LEASE: Fee (Carroll) FIELD/UNIT: Wildcat

LOCATION: 1/4, 1/4 NW SE Sec: 2 TWP: 40S RNG: 7 W 2057 FSL 1902 FEL

## Geology/Ground Water:

There are 11 known points of diversion within 1 mile of this proposed well sight. It is possible that 240 feet of surface casing will not cover all water bearing zones, however the cement will be circulated to surface on the production casing and this will adequately protect any water zoned encountered while drilling. Active water in the streams is used for agricultural purposes. Grassy Hollow Creek is an ephemeral tributary to the East Fork of the Virgin River, and lies within less than 200' of this location. There is also a spring known as Cave Spring that lies within 200 feet of this location, and must be protected by casing and cement.

Reviewer: K. Michael Hebertson

Date: 23-September-2002

## Surface:

The surface owners are Norman and Barbara Carroll of Orderville Utah, and a surface use agreement will be executed prior to the issuance of a permit. There are no known restrictions for this project, and the RDCC comment period has not yielded any notable objections. The operator will be aware of and abide by all county health codes, permitting fees, and other statutory regulations governing this project. Within 3/4 mile of this are several subdivided lots. Notice to the residents, if any, may be necessary before the drilling of the well commences. The location is actually within the city limits of Glendale.

Reviewer: K. Michael Hebertson

Date: 23-September-2002

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

1. The bottom of the surface casing will not be set in a known water bearing sand.
2. A berm will be placed around the top outside edge of the pad.
3. A brush barrier will be left between the Creek and the location.
4. A Synthetic pit liner of a minimum 14 Mil thick is required
5. Top soil will be stored in a low windrow on one end of the location pad.
6. Spoil piles will be placed in low windrows rather than tall piles or mounds.
7. Road shoulders, pipeline access, unused portions of the location, and other disturbed areas will be reseeded with the surface owners recommended seed mixture within year of being disturbed.
8. Reclamation and reseeding will be done in the fall, and, the seed used will be specified by the surface owner.
9. Reserve pit cuttings will be buried a minimum of 4' after the pit liner is folded in.
10. At the surface owners request the unused portions of the location will be reseeded before the drilling operations are completed.
11. All water not purchased from a municipal source must designate a water use permit number and the owner of said permit.

**ON-SITE PREDRILL EVALUATION**  
**Division of Oil, Gas and Mining**

**OPERATOR:** Legend Energy of Utah  
**WELL NAME & NUMBER:** Carroll #1  
**API NUMBER:** 43-025-30032  
**LEASE:** Fee (Carroll) **FIELD/UNIT:** Wildcat  
**LOCATION:** 1/4,1/4 NW SE Sec: 2 TWP: 40S RNG: 7 W 2057 FSL 1902 FEL  
**LEGAL WELL SITING:** 660 F SEC. LINE; 660 F 1/4,1/4 LINE; 1320 F ANOTHER WELL.  
**GPS COORD (UTM):**X =358,329 E;Y =4,135,878 N SURFACE OWNER: Carroll

**PARTICIPANTS:**

Mike Hebertson (DOGM), Harriman Morgan, James Morgan (Legend Energy),  
Larry Rose (Rose Construction) Don Pillmore (Earth & Structure Inc.)  
Norman Carroll & Merlin Esplin (Surface)

**REGIONAL/LOCAL SETTING & TOPOGRAPHY**

Regionally these wells are located on the west central part of the Colorado Plateau, to the north of the town of Glendale. The location is bounded on the east ~2 miles away by the upthrown side of the Sevier fault system which runs northeast southwest. The east Fork of the Virgin River is also east of the location about ¾ of a mile. The surface consists of alluvium, colluvium, pediment alluvium, and landslides over much of the area. It is composed of weathered and decomposed brown and gray sandstone and shale. This location is located on Quaternary Alluvium near an outcrop of the Upper Cretaceous age Wahweap Sandstone and Kaiparowits formation, which are undifferentiated in this area.

**SURFACE USE PLAN**

CURRENT SURFACE USE: Agricultural and wildlife. The wildlife use of this area is very seasonal, and appears to be mostly used for migration. The area is prime for use by raptors, however there may not be a reliable survey for these species.

PROPOSED SURFACE DISTURBANCE: A pad, pit, and access road. The pad will be 130'X 50', the pit is undesignated in size, and the access road will be improved for 100' off an established road.

LOCATION OF EXISTING WELLS WITHIN A 1 MILE RADIUS: 0 unpermitted locations or permitted locations in this area.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: All production facilities will be kept on location. All pipelines and utilities will follow the access road.

SOURCE OF CONSTRUCTION MATERIAL: Borrowed from the construction of the well pad.

ANCILLARY FACILITIES: None were requested.

**WASTE MANAGEMENT PLAN:**

Portable chemical toilets which will be emptied into the municipal waste treatment system; garbage cans on location will be emptied into centralized dumpsters which will be emptied into an approved landfill. No crude oil is expected. Drilling fluid, completion/frac fluid and

cuttings will be buried in the pit after evaporation and slashing the pit liner. Used oil from drilling operations and support will be hauled to a used oil recycling facility and disposed of. Produced water will be disposed of at an approved facility.

#### **ENVIRONMENTAL PARAMETERS**

AFFECTED FLOODPLAINS AND/OR WETLANDS: the pad is on an active drainage known as Grassy Hollow. The creek is a minor source of agricultural water in this area and could easily be negatively impacted by this development.

FLORA/FAUNA: Deer, Coyotes, turkey, Birds, seasonal and resident, Sage Brush, pinion, Juniper, Spruce and other upper Sonoran Desert type vegetation.

SOIL TYPE AND CHARACTERISTICS: Buff colored slightly sandy clay

SURFACE FORMATION & CHARACTERISTICS: Quaternary Alluvium composed of sand and clay.

EROSION/SEDIMENTATION/STABILITY: Erosion is under control the field is being used for livestock, however during periods of high runoff, erosion will be a problem. The sedimentation problems will exist down stream where the creek enters several reservoirs. The pad is stable.

PALEONTOLOGICAL POTENTIAL: None observed.

#### **RESERVE PIT**

CHARACTERISTICS: Unspecified.

LINER REQUIREMENTS (Site Ranking Form attached): A liner is required

#### **SURFACE RESTORATION/RECLAMATION PLAN**

As per the surface use agreement.

SURFACE AGREEMENT: Executed and filed with the APD.

CULTURAL RESOURCES/ARCHAEOLOGY: None is required

#### **OTHER OBSERVATIONS/COMMENTS**

The location was not drawn to the same orientation as the layout on the ground. A discussion of the drilling activity and diversions around the location were discussed and the need to control the runoff from up gradient an off the side hills. The actual cementing and need for the surface casing to be cemented to the surface with good cement were reviewed. The use of the pit as a place to put production water was discussed and the requirements to construct one were outlined.

#### **ATTACHMENTS**

Photos of this location were taken and placed on file.

K. Michael Hebertson  
DOGM REPRESENTATIVE

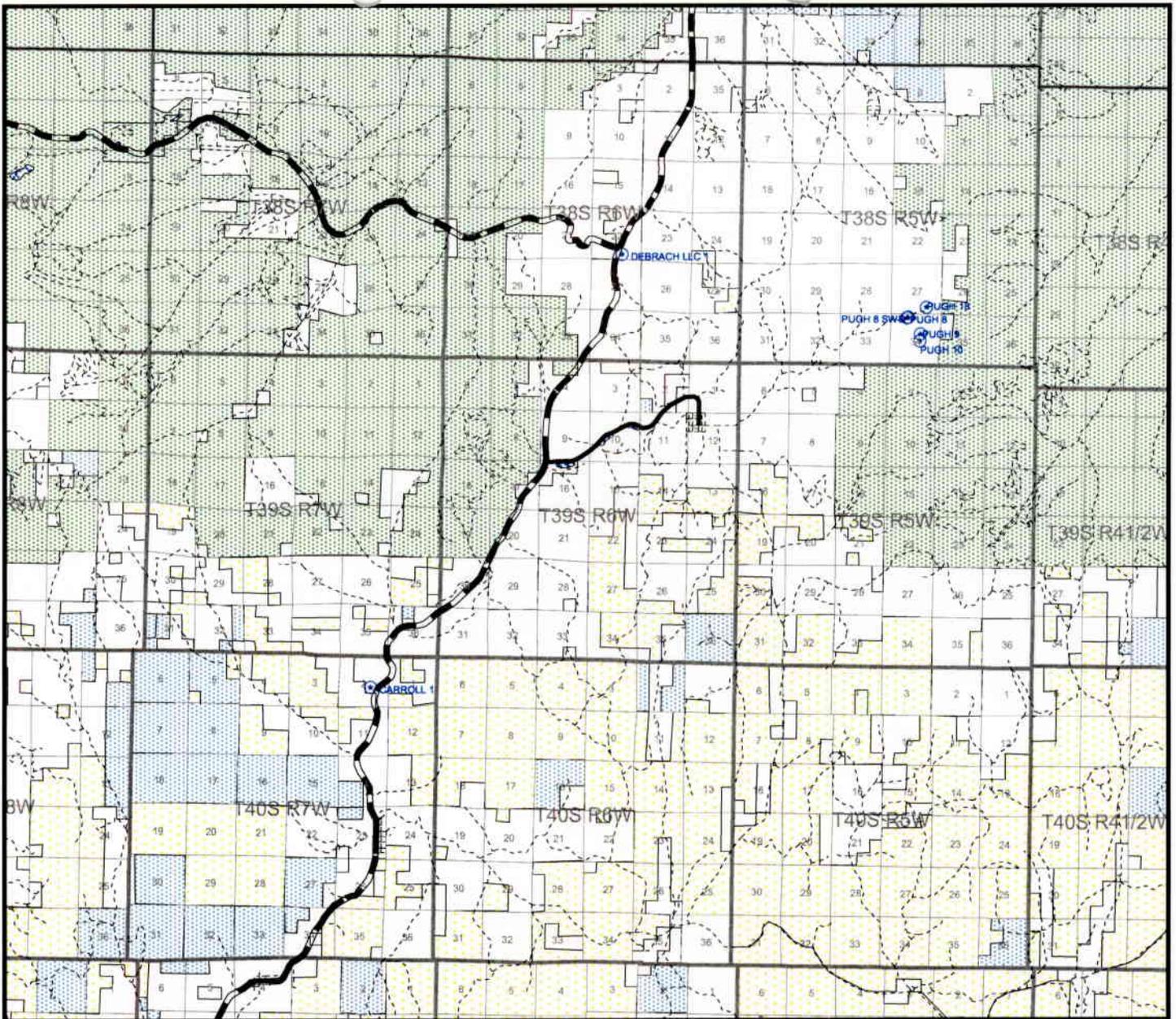
23-September-2002 4:00 PM  
DATE/TIME

**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>15</u>
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	<u>20</u>
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	<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>10</u>
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid	15	
containing significant levels of hazardous constituents	20	<u>10</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>5</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>15</u>

**Final Score**      75      (Level I Sensitivity)

Sensitivity Level I = 20 or more; total containment is required.  
Sensitivity Level II = 15-19; lining is discretionary.  
Sensitivity Level III = below 15; no specific lining is required.



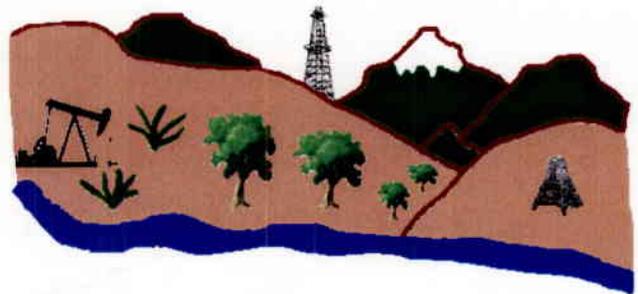
## LEGEND

### Well Status

- GAS INJECTION
- GAS STORAGE WELL
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL

### Land Ownership

- Private Not Classed
- Forest Service
- BLM
- State Lands
- Native American
- Private
- Military
- National Parks
- State Parks
- State Wilderness
- National Recreation
- US Wildlife
- Wilderness
- Bankhead Jones
- Sovereign Lands
- Water
- Intermittent Water

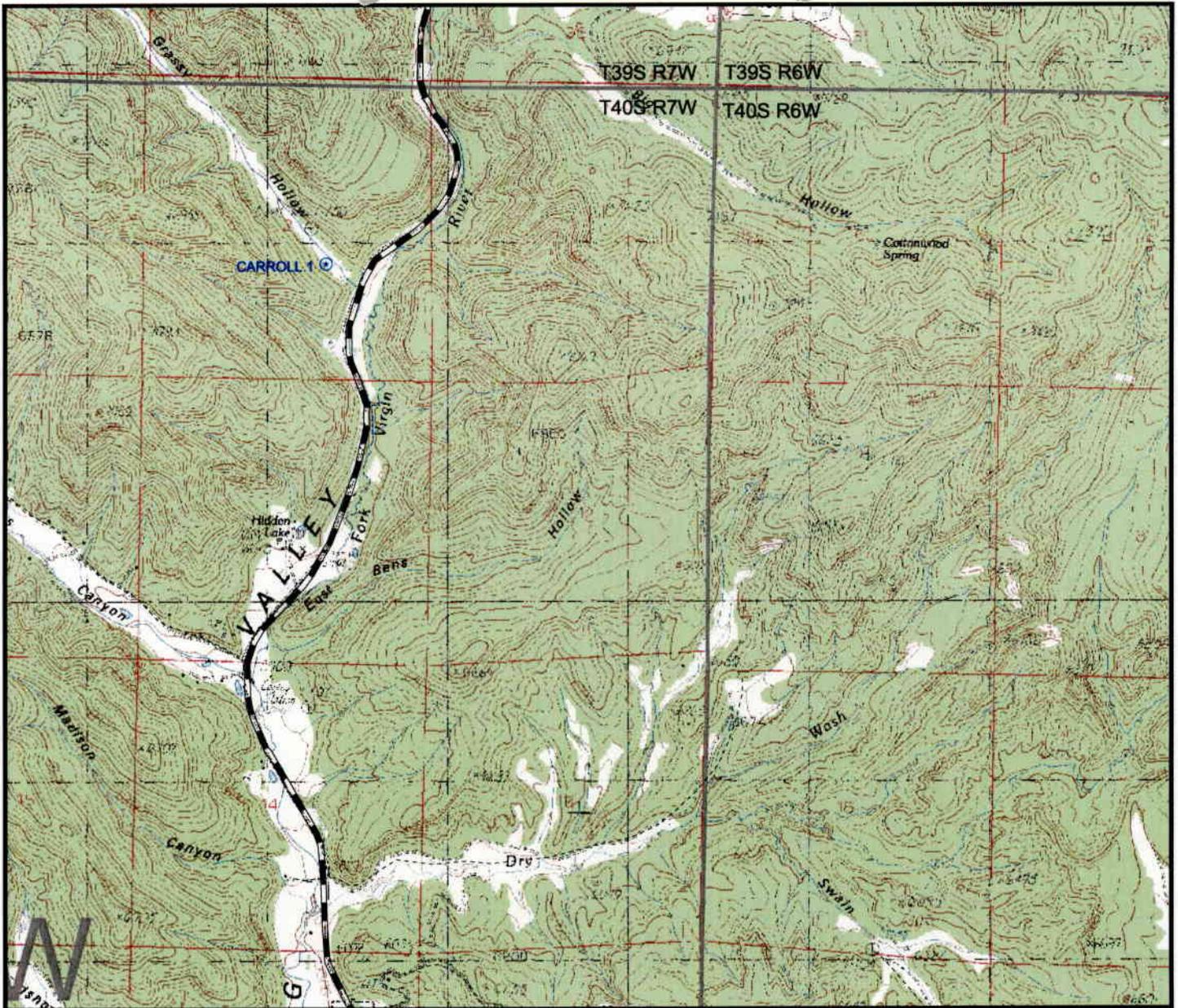


## Utah Oil Gas and Mining



Legend Energy of Utah  
 Carroll #  
 Sec. 2, T40S, R7W  
 Kane County, Utah

Prepared By: K. Michael Hebertson



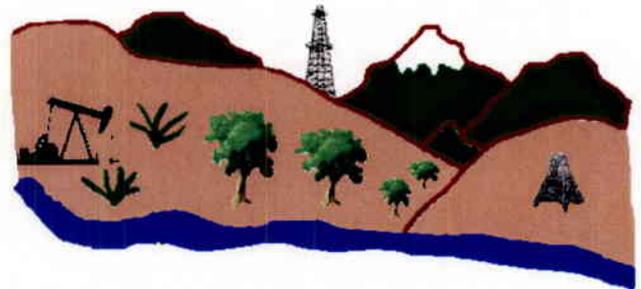
## LEGEND

### Well Status

- ✕ GAS INJECTION
- GAS STORAGE WELL
- LOCATION ABANDONED
- ⊙ NEW LOCATION
- ◊ PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- ✕ TEMP. ABANDONED
- TEST WELL
- ▲ WATER INJECTION
- WATER SUPPLY
- ▣ WATER DISPOSAL

### Land Ownership

- ▣ Private Not Classed
- ▣ Forest Service
- ▣ BLM
- ▣ State Lands
- ▣ Native American
- ▣ Private
- ▣ Military
- ▣ National Parks
- ▣ State Parks
- ▣ State Wilderness
- ▣ National Recreation
- ▣ US Wildlife
- ▣ Wilderness
- ▣ Bankhead Jones
- ▣ Sovereign Lands
- ▣ Water
- ▣ Intermittent Water



## Utah Oil Gas and Mining



Legend Energy of Utah  
 Carroll #  
 Sec. 2, T40S, R7W  
 Kane County, Utah

Prepared By: K. Michael Hebertson

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

FORM 9

004

**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:  
N/A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  
N/A

7. UNIT or CA AGREEMENT NAME:  
N/A

8. WELL NAME and NUMBER:  
Carrol #1

9. API NUMBER:  
4302530032

10. FIELD AND POOL, OR WILDCAT:  
Wildcat

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

2. NAME OF OPERATOR:  
Legend Energy of Utah

3. ADDRESS OF OPERATOR: P.O. Box 231 CITY Glendale STATE UT ZIP 84729 PHONE NUMBER: (435) 648-2647

4. LOCATION OF WELL  
FOOTAGES AT SURFACE: 2,057' FSL 1,902' FEL COUNTY: Kane  
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 40S 7W 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 checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<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.

Proposed Casing and Cementing Program

12 1/4"	8 5/8"	K-55	23	240'	Class G*	236 sx	1.20 cf/sx	15.6
7 7/8"	5 1/2"	K-55	15.5	2,200'	50/50 POZ	330 sx	1.48 cf/sx	13.0
7 7/8"	5 1/2"	K-55	15.5	2,200'	Class G*	110 sx	1.20 cf/sx	15.6

\*Or a comparable cement such as Premium Type V

Surface casing cement will be brought back to the surface until it stays in place.

A sufficient quantity of cement (15#/gal.) to cover all producing zones plus 100' above the top of the 1st producing unit will be pumped.

Actual cement volumes will be based on caliper logs plus 25% will be added.

NAME (PLEASE PRINT) A. H. Morgan TITLE Manager

SIGNATURE A. H. Morgan DATE 10-26-02

(This space for State use only)

RECEIVED

OCT 26 2002

(5/2000)

(See Instructions on Reverse Side)

DIVISION OF  
OIL, GAS AND MINING

Well name:	<b>10-02 Legend Energy Carroll #1</b>	
Operator:	<b>Legend Energy of Utah, LLC</b>	Project ID:
String type:	Surface	43-025-30032
Location:	Kane County	

**Design parameters:**

**Collapse**

Mud weight: 8.600 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: 65 °F  
 Bottom hole temperature: 68 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 130 ft

Cement top:

Surface

**Burst**

Max anticipated surface pressure: 0 psi  
 Internal gradient: 0.478 psi/ft  
 Calculated BHP 115 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 air weight.  
 Neutral point: 209 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 2,000 ft  
 Next mud weight: 9.200 ppg  
 Next setting BHP: 956 psi  
 Fracture mud wt: 13,000 ppg  
 Fracture depth: 240 ft  
 Injection pressure 162 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	240	8.625	24.00	K-55	ST&C	240	240	7.972	2012

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	107	1370	12.78	115	2950	25.72	6	263	45.66 J

↓  
 Butt ≈ 105 psi  
 Adjusted

Prepared by: Dustin Doucet  
 Utah Dept. of Natural Resources

Phone: 801-538-5281  
 FAX: 801-359-3940

Date: October 28, 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 240 ft, a mud weight of 8.6 ppg The casing is considered to be evacuated for collapse purposes.  
 Burst strength is not adjusted for tension.

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

Well name:	<b>10-02 Legend Energy Carroll #1</b>	
Operator:	<b>Legend Energy of Utah, LLC</b>	
String type:	Production	Project ID: 43-025-30032
Location:	Kane County	

**Design parameters:**

**Collapse**  
Mud weight: 9.200 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: 96 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 250 ft

**Burst**

Max anticipated surface pressure: 0 psi  
Internal gradient: 0.478 psi/ft  
Calculated BHP: 1,051 psi

**Burst:**  
Design factor 1.00

Cement top: 3 ft

**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 air weight.  
Neutral point: 1,894 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	2200	5.5	15.50	K-55	ST&C	2200	2200	4.825	11697

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	1051	4040	3.84	1051	4810	4.57	34	222	6.51 J

Prepared by: Dustin Doucet  
Utah Dept. of Natural Resources

Phone: 801-538-5281  
FAX: 801-359-3940

Date: October 28, 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 2200 ft, a mud weight of 9.2 ppg. The casing is considered to be evacuated for collapse purposes.  
Burst strength is not adjusted for tension.

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

# 10-02 Legend Energy Carr #1

## Casing Schematic

Surface

8-5/8"  
MW 8.6  
Frac 13.

TOC @  
3. TOC @  
0.

Surface  
240. MD

w/ 378 washout

600' —  
Kaperowits

800' —  
straight cliff

900' —  
Joultrey

BOP

BHP

$$(0.052)(4.2)(2200) = 1052 \text{ psi}$$

Anticipated = 1000 psi

Gas

$$(0.12)(7300) = 264 \text{ psi}$$

MASP = 788 psi

w/ 158 washout

1400' —  
Trap. Shale

1700' —  
Tap. Shale

1800' —  
Smirt

2185' —  
Bald Knoll

1732' total

ZM BOPF proposed

Adequate DCD  
10/28/02

5-1/2"  
MW 9.2

Production  
2200. MD

**Earth & Structure, Inc**  
800 S. Vermillion Dr.  
Kanab, Utah 84741  
435-644-3125

**facsimile transmittal**

To: **Mike Hobertson** Fax: **801-359-3940**

---

From: **Donn M. Pillmore** Date: **10/26/2002**

---

Re: **Sundry Notices** Pages: **7**

---

CC:

---

Urgent     For Review     Please Comment     Please Reply     Please Recycle

**Mike,**

**Attached are Sundry Notices for the following wells:**

**Carrol #1, Pugh #8, Pugh #9, Pugh #10, Pugh #13, and Pugh #8 Disposal Well.**

**Please give me a call with any questions you might have. Note, I will hand deliver a Sundry Notice for the Debrach #1 well on Monday when you come down for the field review.**

**Thanks,**

**Donn**

**Please fax bid to 435-644-3125**

**RECEIVED**

OCT 26 2002

DIVISION OF  
OIL, GAS AND MINING

.....

003

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
N/A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  
N/A

7. UNIT or CO. AGREEMENT NAME:  
N/A

8. WELL NAME and NUMBER:  
Carrol #1

9. API NUMBER:  
4302630032

10. FIELD AND POOL, OR WILDCAT:  
Wildcat

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

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

2. NAME OF OPERATOR:  
Legend Energy of Utah

3. ADDRESS OF OPERATOR:  
P.O. Box 231 CITY: Glendale STATE: UT ZIP: 84729 PHONE NUMBER: (435) 648-2647

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 2,057' FSL 1,902' FEL COUNTY: Kane

COUNTY, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 40S 7W 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 checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<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"/> COMMINGLES PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPUTE - DIFFERENT FORMATION	

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

Proposed Casing and Cementing Program

12 1/4"	8 5/8"	K-55	23	240'	Class G*	236 sx	1.20 cf/sx	15.6
7 7/8"	5 1/2"	K-55	15.5	2,200'	50/60 POZ	330 sx	1.48 cf/sx	13.0
7 7/8"	5 1/2"	K-55	15.5	2,200'	Class G*	110 sx	1.20 cf/sx	15.6

\*Or a comparable cement such as Premium Type V - Changes in cement type must be approved prior to work being done *DRD*

Surface casing cement will be brought back to the surface until it stays in place.

A sufficient quantity of cement (15#/gal.) to cover all producing zones plus 100' above the top of the 1st producing unit will be pumped.

Actual cement volumes will be based on caliper logs plus 25% will be added.

NAME (PLEASE PRINT) A. H. Morgan TITLE Manager

SIGNATURE A. H. Morgan DATE 10-26-02

(This space for State use only)

007



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

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
(801) 538-5340 telephone  
(801) 359-3940 fax  
(801) 538-7223 TTY  
www.nr.utah.gov

Michael O. Leavitt  
Governor  
Robert L. Morgan  
Executive Director  
Lowell P. Braxton  
Division Director

November 12, 2002

Legend Energy of Utah  
P O Box 231  
Glendale, UT 84729

Re: Carroll 1 Well, 2057' FSL, 1902' FEL, NW SE, Sec. 2, T. 40 South, R. 7 West,  
Kane 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 43-025-30032.

Sincerely,

A handwritten signature in black ink that reads "John R. Baza".

John R. Baza  
Associate Director

pb  
Enclosures  
cc: Kane County Assessor

Operator: Legend Energy of Utah  
Well Name & Number Carroll 1  
API Number: 43-025-30032  
Lease: Fee

Location: NW SE                      Sec. 2                      T. 40 South                      R. 7 West

### 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 Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

#### 5. Operator shall comply with applicable recommendations resulting from Resource Development Coordinating Committee review. Statements attached.

#### 6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

002

SURFACE DAMAGE AND WATER AGREEMENT

Let it be known that on 10-25-, 2002, Norman Carroll, of Kane County, State of Utah, agrees to accept as surface damages \$1500.00 (Fifteen Hundred Dollars) per well drilled on said land owned by the above Norman Carroll, as described in Schedule "A".

SEE SCHEDULE "A" ATTACHED

Also above Norman Carroll, agrees to furnish water for the drilling and completion of each well described in Schedule "A" for \$500.00 (Five Hundred Dollars) per well, if available.

Legend Energy of Utah, LLC, agrees to pay the above amounts to said owners on a well-by-well basis.

Legend Energy of Utah, LLC and/or its assigns will not enter said premises until Legend Energy of Utah, LLC has paid the owners \$1500.00 (Fifteen Hundred Dollars) for surface damages and \$500.00 (Five Hundred Dollars) for water, if available, for drilling of the first well.

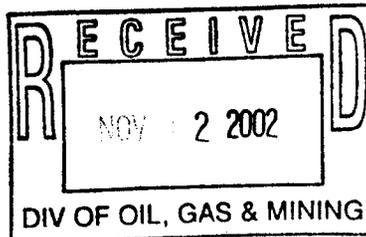
All payments will be made on a well-by-well basis

This Surface Damage and Water Agreement was signed and approved 10-25-02, 2002.

LEGEND ENERGY OF UTAH, LLC

Norman Carroll  
Norman Carroll

A. H. Morgan  
A. H. Morgan, Manager



012



(435) 789-1735

1363

INVOICE NO. 1363

P.O. Box 1817, Vernal, Utah 84078

YOUR ORDER NO.

DATE November 16, 2002

LOCATION: Carroll #1

TO:

LEGEND ENERGY OF UTAH L.L.C.  
P.O. BOX 231  
GLENDALE, UTAH 84729

8 5/8" SURFACE PIPE

WORK TICKET NO.	CODE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
1381	1	Mileage Pump Unit	600	5.00	3000.00
	1	Mileage Crew Truck	600	3.00	1800.00
	1	Pump Charge	238'		2742.00
	2	Additional Hours Pump Truck	2 Hr	595.00	1190.00
	2	Additional Hours Bulk Truck(after 6)			N/C
	2	Operatore Expences 3 men			750.00
	2	Premium Type V Cement	165 Sk	20.00	3300.00
	2	Calcium Chloride	3 Sk	130.00	390.00
	2	Flocele 1/4 #/sk	41 Lbs	3.00	123.00
	2	Blending charge	174'	2.82	490.68
	2	Cement Delivery	2763.4	1.72	4753.04
	2	Sacked gel	4 Sk	30.00	120.00
	2	Top Plug			215.60
Subtotal					18874.32
Less Discount					10380.88
Total					8493.44
Tax					331.47
Total Invoice					\$8824.91

pd ck #  
1074

**Big 4 Cementing, LLC**

1381

P.O. Box 1817  
Vernal, Utah 84078  
Phone 789-1735

Date 11 - 14, 2002

For Ledgend Energy Address \_\_\_\_\_

Lease Carroll #1 1 8 5/8" surface Rig No. Stewart

CODE	DESCRIPTION	UNIT	AMOUNT	
1	Pump truck mileage	600 mi	5 <sup>00</sup>	3000 <sup>00</sup>
1	Crew pickup mileage	600 mi	3 <sup>00</sup>	2800 <sup>00</sup>
1	Pump charge (84Hrs)	238 FT	2742 <sup>00</sup>	2742 <sup>00</sup>
2	Additional Hours Pump truck	2 HRS	595 <sup>00</sup>	1190 <sup>00</sup>
2	Additional Hours Bulk truck (AFMS 6 Hours)	0 HRS	109 <sup>00</sup>	—
2	Operators Expenses (3-men)	Day	250 <sup>00</sup>	750 <sup>00</sup>
2	Premium type II cement	165 Sks	20 <sup>00</sup>	3300 <sup>00</sup>
2	Calcium chloride 2% BY unit weight	3 Sks	130 <sup>00</sup>	390 <sup>00</sup>
2	Flocrete 1/4 #/sk	41 lbs	3 <sup>00</sup>	123 <sup>00</sup>
2	Blending charge	174 <sup>00</sup> /FT	2.82	490.68
2	Cement delivery charge 15791 lbs	273.4 ton mile	1.72	4753.04
2	Sacked gel	4 Sks	30 <sup>00</sup>	120 <sup>00</sup>
2	TOP plug 8 5/8	1 EA	215.60	215.60
Sub Total			18874.32	<del>19874.32</del>
Less Discount			10380.88	<del>10380.88</del>
Total			8493.44	<del>8493.44</del>
Tax			331.47	<del>331.47</del>
TOTAL INVOICE			8824.91	<del>8824.91</del>

#1070  
11/14/02

Operator Donald Handy Accepted and Approved by A.H. Morgan

For Legend Energy

Lease Carroll #1 238' 8 5/8 Surface casing Rig No. Stewart

## JOB LOG

TIME	DESCRIPTION	RATE	PSI	VOLUME
13 00	On location			
18 50	CASING on bottom			
19 18	Start Fresh Ahead	4	0	0
19 21	End Fresh	4	100	10
19 21	Start gel water	4	100	0
19 23	End gel	4	100	10
19 23	Start 165 <sup>sks</sup> Premium cement at 156#	4	100	0
19 32	End cement	4	50	34.6
19 32	drop Plug	0	50	-
19 34	Start Fresh displacement	3	50	0
19 37	cement Returns to Surface	3	130	10
19 37	Slow Rate	2	100	10
19 40	Plug lands	1	130	13
19 40	shut down	0	250	13
19 45	Release pressure check Float			
19 47	Float holds			
19 47	End Job			
<p>165 SACKS Premium type II Cement                  2% calc<sup>d</sup> 1/4 #/sk Floccle                  15.6 #/gal 1.18 <sup>cu ft</sup>/sk 5.2 gal/sk</p>				

Operator Donald Hards

Accepted and Approved by \_\_\_\_\_



(435) 789-1735

1366

INVOICE NO. 1366

P.O. Box 1817, Vernal, Utah 84078

YOUR ORDER NO.

DATE November 20, 2002

LOCATION: Carral #1

TO:

LEGEND ENERGY OF UTAH L.L.C.  
P.O. BOX 231  
GLENDALE, UTAH 84729

SQUEEZE JOB  
TO CUT OFF  
WATER ZONE

WORK TICKET NO.	CODE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
1486	1	Mileage Pump Unit	660	5.00	3300.00
	1	Mileage Crew Truck	660	3.00	1980.00
	1	Pump Charge	540'		2742.00
	1	Material Trailer			1000.00
	2	Caclium Chloride	20 Sks	130.00	2600.00
	2	Gypsum	5 Sks	60.00	300.00
	2	Soidum Silicate	440 Gal	12.00	5280.00
	2	Operators Expense 4 Men		300.00	1200.00
	2	Additional Hours	5 Ea	500.00	2500.00
	2	Cement Premium Type V	150 Sks	20.00	3000.00
	2	Blending charge	159 cuft	2.82	448.38
	2	Delivery charge	2425.5	1.72	4171.86
Subtotal					28522.24
Less Discount					14261.12
Total					14261.12
Tax					513.49
Total Invoice					\$14774.61

# Big 4 Cementing, LLC

1486

P.O. Box 1817  
Vernal, Utah 84078  
Phone 789-1735

Date 11-18, 2002

For Ledgend Energy Address \_\_\_\_\_

Lease Corral #1 Rig No. \_\_\_\_\_

CODE	DESCRIPTION	UNIT	AMOUNT		
	Mileage Pump Unit	660 Mi	5 <sup>00</sup>	3300	<sup>00</sup>
	Mileage Crew Truck	660 Mi	3 <sup>00</sup>	1980	<sup>00</sup>
	Pump Charge	540 FT		2742	<sup>00</sup>
	Material Trailer	1 EA		1000	<sup>00</sup>
	Calcium Chloride	20 SK	130 <sup>00</sup>	2600	<sup>00</sup>
	Gypsum	5 SKS	60 <sup>00</sup>	300	<sup>00</sup>
	Sodium Silicate	440 gal	12 <sup>00</sup>	5280	<sup>00</sup>
	Operator Expenses <u>4 Men</u>	1 Day	300 <sup>00</sup>	1200	<sup>00</sup>
	addition Hrs	5 EA	500 <sup>00</sup>	2500	<sup>00</sup>
	Cement Premium Type II	150 SKS	20 <sup>00</sup>	3000	<sup>00</sup>
	Blending Charge	159 CURF	2 <sup>82</sup>	448	<sup>38</sup>
	Delivery Charge Mi 330 Wt 14700	24255 T.MI	1 <sup>72</sup>	4171	<sup>86</sup>
<p style="font-size: 2em; font-family: cursive;">Paid w/ check # 1085</p>					
	<b>Sub Total</b>			28522	<sup>24</sup>
	<b>Less Discount</b>			14261	<sup>12</sup>
	<b>Total</b>			14261	<sup>42</sup>
	<b>Tax</b>			513	<sup>49</sup>
	<b>TOTAL INVOICE</b>			14774	<sup>61</sup>

Operator J.B. Tenny Accepted and Approved by \_\_\_\_\_

# Big4

CEMENTING

(435) 789-1735

P.O. Box 1817, Vernal, Utah 84078

020

## JOB SUMMARY REPORT

Customer <i>Ledgend Energy</i>	Date <i>11-18-02</i>	Ticket Number <i>1486</i>
Lease & Well Name <i>Corral #1</i>	Location	County

Job Type <i>Squeeze Shut off Water Flow</i>	Drilling Contractor <i>Stewart Brothers</i>			
Surface CSG Size <i>8 5/8</i>	Wt./Grade <i>24 #/ft</i>	Thread	Depth From <i>0</i>	To <i>225</i>
Inter CSG Size	Wt./Grade	Depth	Depth From	To
Prod. CSG Size	Wt./Grade	Depth	Depth From	To
Liner CSG Size	Wt./Grade	Depth	Depth From	To
TBG or D.P. Size	Wt./Grade	Depth	Depth From	To

SKS	Materials Furnished	Slurry Wt. P.P.G.	Slurry Yield FT <sup>3</sup>	Water Gal./Sk.
<i>50</i>	<i>10% Gypsum 2% Calciz</i>	<i>14.2</i>	<i>1.6</i>	
<i>100</i>	<i>3% Calciz</i>	<i>16.0</i>	<i>1.09</i>	<i>4.5</i>

Float Equipment  
*NONE*

Equipment & Personnel  
*Ed Dansie Blinn Tenney Sam Dansie Troy Blazier*

Notes:  
*Pumped 440 gal Sodium Silicate*



# Big4

CEMENTING

(435) 789-1735

1370

INVOICE NO. 1370

P.O. Box 1817, Vernal, Utah 84078

YOUR ORDER NO.

DATE November 25, 2002

LOCATION: Corral #1

TO:

LEGEND ENERGY OF UTAH L.L.C.  
P.O. BOX 231  
GLENDALE, UTAH 84729

6 7/8" CASING  
TO COVERT + SEAL  
WATER ZONE

WORK TICKET NO.	CODE	DESCRIPTION	QTY.	UNIT PRICE	TOTAL
1386					
	1	Pump Truck Mileage	600	5.00	3000.00
	1	Crew Truck Mileage	600	3.00	1800.00
	1	Pump Charge	924'		2742.00
	2	50/50 Poz Cement	180 sks	16.26	2926.80
	2	Salt	260 Lbs	.25	65.00
	2	Gel	3 Sks	30.00	90.00
	2	Flocele	45 Lbs	3.00	135.00
	2	Blending charge	190	2.82	535.80
	2	Cement delivery charge	2309.6	1.72	3972.51
	2	Operators Expences	3 men	250.00	750.00
		Subtotal			16017.11
		Less Discount			8396.91-
		Total			7620.20
		Tax			225.95
		Total Invoice			\$7846.15

pd  
ck# 1093

# Big 4 Cementing, LLC

1386

P.O. Box 1817  
 Vernal, Utah 84078  
 Phone 789-1735

Date 11-21, 2008

For Lodgend Energy Address \_\_\_\_\_

Lease Corral #1 Rig No. \_\_\_\_\_

CODE	DESCRIPTION	UNIT	AMOUNT		
1	Pump truck mileage	600 mi	5 <sup>00</sup>	3000	00
1	crew pickup mileage	600 mi	3 <sup>00</sup>	1800	00
1	Pump charge	924 FT	2742 <sup>00</sup>	2742	00
2	50/50 Poz cement	180 sks	16.26	2926.80	
2	salt	260 lbs	.25	65.00	
2	gel	3 sks	30 <sup>00</sup>	90	00
2	Fluorele	45 lbs	3 <sup>00</sup>	135	00
2	Blending charge	190 cu/ft	2.82	535.80	
2	cement delivery charge	15397 2309.6 <sup>ton</sup> mile	1.72	3972.51	
2	operators Expenses	3 hrs	250 <sup>00</sup>	750	00
				Sub Total	16017 11
				Less Discount	8396.91
				Total	7620 20
				Tax	225 95
				<b>TOTAL INVOICE</b>	<b>7846 15</b>

PAID  
 ck # 1093

Operator Donald Harbo Accepted and Approved by A.H. Morgan

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

FORM 6

008

**ENTITY ACTION FORM**

Operator: Legend Energy of Utah, LLC Operator Account Number: N 1890  
 Address: PO Box 231  
city Glendale  
state UT zip 84729 Phone Number: (435) 648-2647

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4302530032	Carroll #1		NWSE	2	40S	7W	Kane
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	13673	11/13/2002		11-27-02		
Comments:							

**Well 2**

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

**Well 3**

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

**ACTION CODES:**

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

A. H. Morgan

Name (Please Print)

A. H. Morgan

Signature

Manager

11/26/2002

Title

Date

**Earth & Structure, Inc**  
800 S. Vermillion Dr.  
Kanab, Utah 84741  
435-644-3125

**facsimile transmittal**

**To:** Mike Hebertson & Diana Mason      **Fax:** 801-359-3940

---

**From:** Donn M. Pillmore      **Date:** 11/27/2002

---

**Re:** Revised Spud Reports      **Pages:** 3

---

**CC:**

Urgent       For Review       Please Comment       Please Reply       Please Recycle

**Mike,**

Attached are revised spud reports for the Pugh #8 and the Cannon #1 wells that have all of the information that is required on a spud report. I fully understand that the spudding in of a well is to be reported to the division within 24 hours prior to starting the operation and that it should contain all of the information I have posted on these reports. I have talked to Harriman and told him that this procedure has to take place on all future wells. Give me a call if you need additional information.

Thanks,  
  
Donn

**RECEIVED**  
NOV 27 2002  
DIVISION OF  
OIL, GAS AND MINING

.....

009

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: N/A
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		7. UNIT or O.A. AGREEMENT NAME: N/A
		8. WELL NAME and NUMBER: Carroll #1
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		9. API NUMBER: 4302530032
2. NAME OF OPERATOR: Legend Energy of Utah, LLC		10. FIELD AND POOL, OR WILDCAT: Wildcat
3. ADDRESS OF OPERATOR: PO Box 231 CITY Glendale STATE UT ZIP 84729		PHONE NUMBER: (435) 848-2647
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2,057' FSL 1,902' FEL QTR/CTR. SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 40S 7W		COUNTY: Kane STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: <u>11/13/2002</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Soud Well</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.

The Carroll #1 Well was spudded on November 13, 2002.

NAME (PLEASE PRINT) <u>A. H. Morgan</u>	TITLE <u>Manager</u>
SIGNATURE <u>A. H. Morgan</u>	DATE <u>11-26-02</u>

(This space for State use only)

010

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

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER N/A
2. NAME OF OPERATOR: Legend Energy of Utah, LLC		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
3. ADDRESS OF OPERATOR: PO Box 231 CITY Glendale STATE UT ZIP 84729		7. UNIT or CA AGREEMENT NAME: N/A
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2.057' FSL 1,902' FEL COUNTY: Kane		8. WELL NAME and NUMBER: Carroll #1
QTRCTR. SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 40S 7W STATE: UTAH		9. API NUMBER: 4302530032
		10. FIELD AND POOL, OR WILDCAT: Wildcat

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start <u>11/13/2002</u>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>Spud Well</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLICATE - DIFFERENT FORMATION	

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

This is a revised report on the spudding of the Carroll #1 Well. This should contain all of the information required on a spudding report.

Drilling Contractor: Stewart Brothers Drilling Company  
PO Box 2067  
306 Airport Road  
Milan, NM 87021

H. Stewart, President  
505-287-2986

Rig #: 51. Rig Type: Failing 2500  
Well was spudded on November 13, 2002 at 10:00pm  
Continuous Drilling commenced thereafter

A.H. Morgan reported the spud Phone No.: 435-848-2647

NAME (PLEASE PRINT) <u>A. H. Morgan</u>	TITLE <u>Manager</u>
SIGNATURE <u>A.H. Morgan (DMP)</u>	DATE <u>11/27/2002</u>

(This space for State use only)



4200 Skyline Drive, Farmington, New Mexico 87401, (505) 325-8531, Fax (505) 325-3861  
 Email: [swgslognm@earthlink.net](mailto:swgslognm@earthlink.net) or on the web at [www.southwestgeophysical.com](http://www.southwestgeophysical.com)

December 12, 2003

Mike Herbertson  
 State Of Utah, Dept. of Natural Resources  
 Division of Oil, Gas & Mining  
 P.O. Box 145801  
 Salt Lake City, Utah 84114-5801

Dear Mr. Herbertson,

Harry Morgan with Legend Energy of Utah, LLC asked me to forward you these copies of logs from the three wells in Kane County which we worked on.

*logs filed in log files*

Sincerely,

A handwritten signature in black ink, appearing to read 'M. J. Peterson'.

Mick Peterson—Manager

ENCLOSED: CARROLL #1 T 405 R 09W S-02  
 PUGH #8 43-025-30032  
 CHRISTENSEN # 1X

RECEIVED

DEC 19 2003

DIV. OF OIL, GAS & MINING

March 05, 2004

Mr. K. Michael Hebertson  
Manager, Hearings and Enforcement  
Department of Natural Resources  
Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801

Dear Mr. Hebertson:

Enclosed Herewith are the Sundry Notices for the plugging and abandonment for the Carroll No. 1 and the Pugh No. 8.

I have outlined a proposed plan and estimated cost for each.

Also, please note on the plan for the Pugh No. 8, that Legend Energy of Utah LLC withdraws their applications for Pugh No. 8 WDW and Pugh No. 1 WD.

Please let me know as soon as is convenient regarding your acceptance of the notice and plan or if there are deficiencies.

Thank you for your help and patience.

Sincerely,



Roger F. Holland  
Geological Consultant

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MAR 09 2004

DIV. OF OIL, GAS & MINING

013

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

2. NAME OF OPERATOR: Legend Energy of Utah LLC

3. ADDRESS OF OPERATOR: 195 E. Settlers Canyon Rd #71  
CITY Cedar City STATE UT ZIP 84720 PHONE NUMBER: 435 867-6317

4. LOCATION OF WELL FOOTAGES AT SURFACE: X 358329 Y 4135878 Elev. 6150

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE Sec. 2 T. 40 S. R. 7 W.

5. LEASE DESIGNATION AND SERIAL NUMBER:

FEE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

8. WELL NAME and NUMBER:

Carroll No. 1

9. API NUMBER:

43-025-30032-00-00

10. FIELD AND POOL, OR WILDCAT:

Wildcat

COUNTY: Kane

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"/> CHANGE TUBING	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<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 checked="" 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.

See Attached

COPY SENT TO OPERATOR  
Date: 4-16-04  
Initials: CHD

NAME (PLEASE PRINT) Harriman Morgan TITLE Owner

SIGNATURE Ryan J. Holland Agent DATE 03-05-04

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING  
DATE: 04/15/04  
BY: [Signature]

RECEIVED  
MAR 09 2004

DIV. OF OIL, GAS & MINING

See conditions of approval (Attached) (See instructions on Reverse Side)

## Proposal for Plug and Abandonment

It is proposed that well no 43-025-30032-00-00 (Carroll No. 1) be "plugged and abandoned" in the following manner: The borehole re-entered using an "open end" string of drill pipe and proceed to a depth of 1800 feet below ground level. At this point, a cement slurry will be pumped into the hole in sufficient volume to fill the entire drill hole void up to a below ground level of 1400 feet. At this point in the operation, the drill pipe string will be removed to a below ground level of 1200 feet and cement slurry will be pumped into the drill hole in sufficient volume to fill the entire drill hole void up to 1000 feet below ground level. This process will be repeated until the entire bore hole is filled with cement slurry. It is estimated that the volume of cement slurry required will be 25.13 cubic yards. Using a hole diameter of 8.025 inches from ground level to TD of 1932 feet derives this volume. It is noted that the Carroll No. 1 did produce water flows (artesian). It also produced minor methane gas. Therefore, the plugging fluid may require the addition of a "weighting" material such as barite.

It is reported that snow levels in the State of Utah are the heaviest for the past eleven years. Here in Southern Utah we have received heavy precipitation. The Carroll No. 1 location is at an elevation of over 6000 feet and is tucked on the north side of a high ridge. The snow and ground frost at this location will undoubtedly last into late April. This will delay any proper reclamation and impede plugging procedures. In the interest of performing a more effective and efficient plug and abandon program it is proposed that Legend Energy of Utah LLC complete the plug and abandonment of the Carroll No. 1 on or before June 30, 2004.

The landowner, Mr. Norman Carroll, will reclaim the location disturbance related to the Carroll No. 1. Mr. Carroll is the surface owner and has requested that he be responsible for this activity. Mr. Carroll possesses the necessary equipment and expertise to complete this phase of the project. Leveling, contouring and reseeding of the location will be as per the landowner's requirements. Legend Energy of Utah LLC, will, in the interest of both Legend Energy and the State of Utah obtain a written "Notice of Release" from the landowner upon completion of the plug and abandonment procedure.

It is estimated that the entire plugging and abandonment of the Pugh No. 8 will require \$15,000 to complete.

Plug from 1800' to  
Surface with  
Class B  
Per Herriman  
margin



State of Utah

Department of  
Natural Resources

Division of  
Oil, Gas & Mining

ROBERT L. MORGAN  
*Executive Director*

LOWELL P. BRAXTON  
*Division Director*

MICHAEL O. LEAVITT  
*Governor*

OLENE S. WALKER  
*Lieutenant Governor*

## ***CONDITIONS OF APPROVAL TO PLUG AND ABANDON WELL***

Well Name and Number: Carroll No. 1  
API Number: 43-025-30032  
Operator: Legend Energy of Utah, LLC  
Reference Document: Original Sundry dated March 5, 2004,  
received by DOGM on March 9, 2004

### Approval Conditions:

1. Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338.
2. Cement used for plugging shall be API Class "B" or ASTM Type II mixed at 15.6 ppg with 5.2 gallons of water per sack (94 lbs) of cement. An equivalent cement slurry may be substituted upon approval from the Division.
3. A dry hole marker shall be erected in accordance with R649-3-24-7 unless a variance for a subsurface marker is requested by the operator and approved by the Division.
4. Surface reclamation shall be done in accordance with R649-3-34 – Well Site Restoration. Evidence of compliance with this rule should be supplied to the Division upon completion of reclamation.
5. Form 8 – Well Completion or Recompletion Report and Log shall be submitted to the Division upon completion of work and shall include all pertinent well data including casing sizes, weights and grades, formation tops, test data and cement types, weights and quantities.
6. All requirements in the Oil and Gas Conservation General Rules R649-3-24 and R649-3-31 and Board order 190-13 shall apply.
7. If there are any changes to the plugging procedure or wellbore configuration, notify Dustin Doucet at 801-538-5281 prior to continuing with the procedure.
8. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

Dustin K. Doucet  
Petroleum Engineer

April 15, 2004

Date

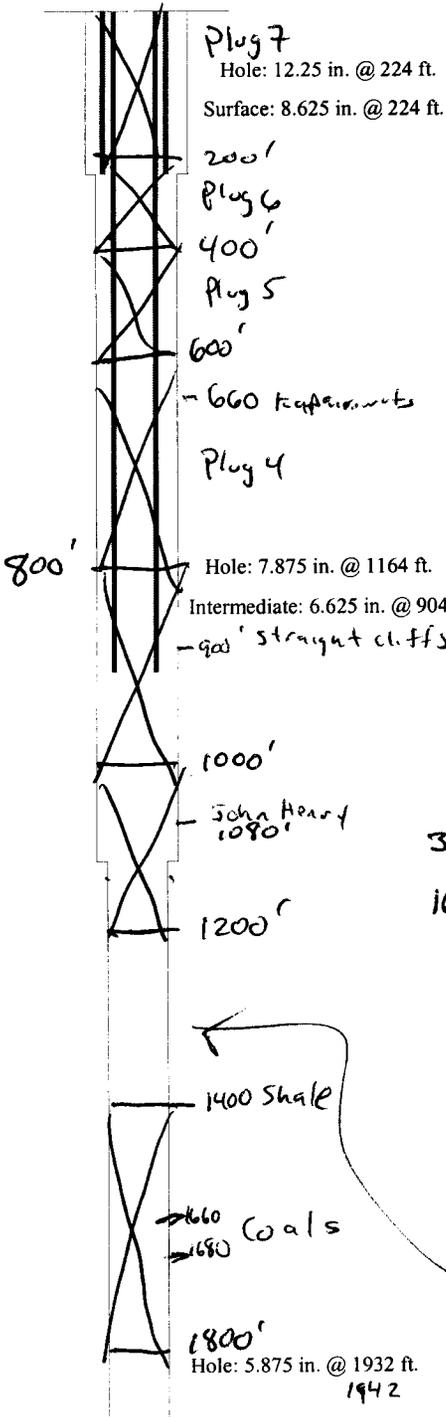
API Well No: 43-025-30032-00-00 Permit No:  
 Company Name: LEGEND ENERGY OF UTAH LLC  
 Location: Sec: 2 T: 40S R: 7W Spot: NWSE  
 Coordinates: X: 358329 Y: 4135878  
 Field Name: WILDCAT  
 County Name: KANE

Well Name/No: CARROLL 1

String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)	Capacities f/cf
HOL1	224	12.25			
SURF	224	8.625			
HOL2	1164	7.875			$\frac{(1.2)(7.875)^2}{173.35} = 0.4871 \rightarrow 2053$
II	904	6.625			$\frac{(1.2)(6.625)^2}{173.35} = 0.2711 \rightarrow 4.871$
HOL3	1932	5.875			$\frac{(1.2)(5.875)^2}{173.35} = 0.2711 \rightarrow 3.689$

6 5/8" 20#



Plugs 4-7 (each plug)  
 $200' / (1.15 \times 4.871) = 36.5x$  = 42 cf → 1.6 cy  
 Total 4-7 → 150sx = 168 cf → 6.3 cy

Cement Information

Plug 3  
 $100' / (1.15)(2.053) = 43sx$  = 50 cf } → 2.7 cy  
 $100' / (1.15)(4.871) = 18.2x$  = 21 cf }  
 61sx

Perforation Information

Plug 2  
 $36' / (1.15)(3.689) = 9sx$  = 10 cf = 0.4 cy  
 $164' / (1.15)(2.053) = 70sx$  = 80 cf = 3 cy  
 80sx = 3.4 cy

Formation Information

Plug 1  
 $400' / (3.689)(1.15) = 100sx$  = 110 cf = 4 cy  
 + 200' plug + 50sx = 55cf = 2 cy

TD: TVD: PBTD:

Total 18.4 cy  
 Proposed 25 cy Adequate ✓

12/31/2003

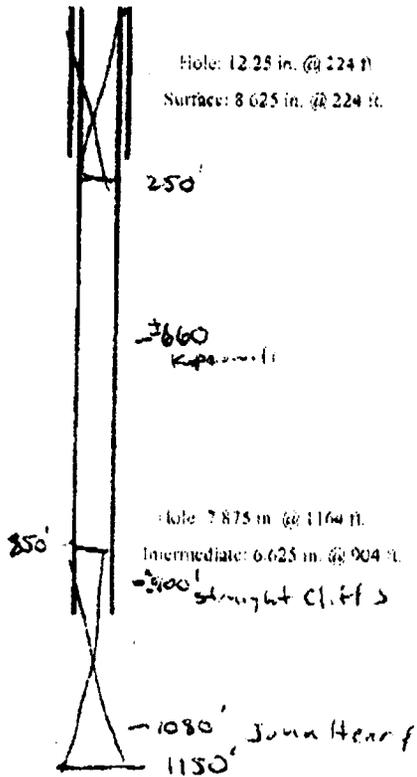
### Wellbore Diagram

r263

API Well No: 43-025-30032-00-00    Permit No:    Well Name/No: CARROLL I  
 Company Name: LBOEND ENERGY OF UTAH LLC  
 Location: Sec: 2 T: 40S R: 7W Spot: NWSE  
 Coordinates: X: 358329 Y: 4135878  
 Field Name: WILDCAT  
 County Name: KANE

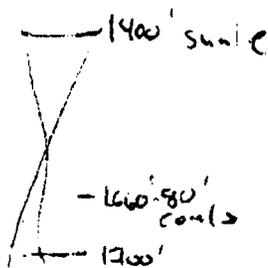
#### String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)
HOLE1	224	12.25		
SURF	224	8.625		
HOLE2	1164	7.875		
H	904	6.625		
HOLE3	1932	5.875		



#### Cement Information

#### Perforation Information



#### Formation Information

Formation Depth      Formation Depth

Hole: 5.875 in. @ 1932 ft.

TD:      TVD: 1942    PSTD:

014

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

AMENDED REPORT FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

b. TYPE OF WORK: NEW WELL, HORIZ. LATS., DEEP-EN, RE-ENTRY, DIFF. RESVR., OTHER P+A

2. NAME OF OPERATOR: Legend Energy of Utah LLC

3. ADDRESS OF OPERATOR: 195 E. Fiddlers Canyon #71 Cedar City UT 84720

4. LOCATION OF WELL (FOOTAGES) AT SURFACE: X: 358329 Y: 4135878 AT TOP PRODUCING INTERVAL REPORTED BELOW: N/A 2059 FSL 1902 FEL AT TOTAL DEPTH: N/A

5. LEASE DESIGNATION AND SERIAL NUMBER: 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 7. UNIT or CA AGREEMENT NAME: 8. WELL NAME and NUMBER: CARROLL No. 1 9. API NUMBER: 43-025-30032 10. FIELD AND POOL, OR WILDCAT: Wildcat 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 40S 7W 12. COUNTY: KANE 13. STATE: UTAH

14. DATE SPURRED: 11-13-02 15. DATE T.D. REACHED: 11-27-02 16. DATE COMPLETED: 6-18-04 ABANDONED, READY TO PRODUCE 17. ELEVATIONS (DF, RKB, RT): 6150

18. TOTAL DEPTH: MD 1932 TVD 1932 19. PLUG BACK T.D.: MD 1105' TVD 20. IF MULTIPLE COMPLETIONS, HOW MANY?: N/A 21. DEPTH BRIDGE MD N/A PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN: ELECTRIC LOG, GR/BUK DEN/NEUT 23. WAS WELL CORED?, WAS DST RUN?, DIRECTIONAL SURVEY?

Table with 10 columns: HOLE SIZE, SIZE/GRADE, WEIGHT (#ft.), TOP (MD), BOTTOM (MD), STAGE CEMENTER DEPTH, CEMENT TYPE & NO. OF SACKS, SLURRY VOLUME (BBL), CEMENT TOP \*\*, AMOUNT PULLED. Row 1: 5 1/2", 6 5/8 J-55, 20#, 900', ASME Type II, 10yd^3, Surface, None.

Table with 9 columns: SIZE, DEPTH SET (MD), PACKER SET (MD), SIZE, DEPTH SET (MD), PACKER SET (MD), SIZE, DEPTH SET (MD), PACKER SET (MD). All entries are blank.

Table with 10 columns: FORMATION NAME, TOP (MD), BOTTOM (MD), TOP (TVD), BOTTOM (TVD), INTERVAL (Top/Bot - MD), SIZE, NO. HOLES, PERFORATION STATUS. Includes 'None' for producing intervals and perforation record.

Table with 2 columns: DEPTH INTERVAL, AMOUNT AND TYPE OF MATERIAL. Entry: N/A.

29. ENCLOSED ATTACHMENTS: ELECTRICAL/MECHANICAL LOGS, GEOLOGIC REPORT, DST REPORT, DIRECTIONAL SURVEY, SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION, CORE ANALYSIS, OTHER: RECEIVED P+A

014

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

AMENDED REPORT  FORM 8  
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

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

2. NAME OF OPERATOR: Legend Energy of Utah LLC

3. ADDRESS OF OPERATOR: 195 E. Fiddlers Canyon #71 Cedar City UT 84720 PHONE NUMBER: 435-867-6317

4. LOCATION OF WELL (FOOTAGES)  
AT SURFACE: X: 358329 Y: 4135878  
AT TOP PRODUCING INTERVAL REPORTED BELOW: N/A 2059 FSL 1902 FEL  
AT TOTAL DEPTH: N/A

5. LEASE DESIGNATION AND SERIAL NUMBER:  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
7. UNIT or CA AGREEMENT NAME  
8. WELL NAME and NUMBER: CARROLL No. 1  
9. API NUMBER: 43-025-30032  
10. FIELD AND POOL, OR WILDCAT: WILDCAT  
11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWSE 2 40S 7W  
12. COUNTY: KANE 13. STATE: UTAH

14. DATE SPUDDED: 11-13-02 15. DATE T.D. REACHED: 11-27-02 16. DATE COMPLETED: 6-18-04 ABANDONED  READY TO PRODUCE  17. ELEVATIONS (DF, RKB, RT (GL)): 6150

18. TOTAL DEPTH: MD 1932 TVD 1932 19. PLUG BACK T.D.: MD 1105' TVD \_\_\_\_\_ 20. IF MULTIPLE COMPLETIONS, HOW MANY? \* N/A 21. DEPTH BRIDGE MD N/A PLUG SET: TVD \_\_\_\_\_

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)  
ELECTRIC LOG, GR/BUK DEN/NEUT  
23. WAS WELL CORED? NO  YES  (Submit analysis)  
WAS DST RUN? NO  YES  (Submit report)  
DIRECTIONAL SURVEY? NO  YES  (Submit copy)

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

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
<u>5 1/2"</u>	<u>6 5/8</u> <u>J-55</u>	<u>20 #</u>		<u>900'</u>		<u>ASME</u> <u>TYPE II</u>	<u>10 yd<sup>3</sup></u>	<u>SURFACE</u>	<u>NONE</u>

25. TUBING RECORD

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

26. PRODUCING INTERVALS None 27. PERFORATION RECORD None

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. N/A  
DEPTH INTERVAL: N/A  
Coals From logs ± 1660-80  
Scale ± 1400  
400 ~ 660 strip 900 straight 1080 down  
Sent @ 224'

29. ENCLOSED ATTACHMENTS:  ELECTRICAL/MECHANICAL LOGS  GEOLOGIC REPORT  DST REPORT  DIRECTIONAL SURVEY  SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION  CORE ANALYSIS  OTHER: RECEIVED  
30. WELL STATUS: PTA

JUL 15 2004

31. INITIAL PRODUCTION

*None*

INTERVAL A (As shown in item #26)

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

INTERVAL B (As shown in item #26)

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

INTERVAL C (As shown in item #26)

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

INTERVAL D (As shown in item #26)

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

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

33. SUMMARY OF POROUS ZONES (Include Aquifers):

*None*

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

34. FORMATION (Log) MARKERS:

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

35. ADDITIONAL REMARKS (Include plugging procedure)

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

NAME (PLEASE PRINT) A. H. MORGAN TITLE MANAGER  
 SIGNATURE A. H. Morgan DATE 7-12-04

This report must be submitted within 30 days of

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

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

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

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

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