

# FILE NOTATIONS

Entered in NID File   
 Entered On S R Sheet   
 Location Map Pinned   
 Card Indexed   
 I W R for State or Fee Land

Checked by Chief   
 Copy NID to Field Office   
 Approval Letter   
 Disapproval Letter

## COMPLETION DATA:

Date Well Completed 1-16-60  
 OW..... WW..... TA.....  
 GW..... OS..... PA X

Location Inspected 1-31-60  
 Bond released  
 State of Fee Land

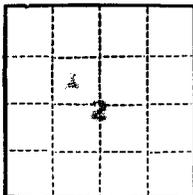
## LOGS FILED

Driller's Log 2-11-60  
 Electric Logs (No. ) 3  
 E..... I..... E-I 2 GR..... GR-N 2 Micro 2  
 Lat..... Mi-L..... Sonic..... Others.....

Scout Report sent   
 Noted in the NID File   
 Location map pinned   
 Approval or Disapproval Letter

Date Completed, P. & A, or  
 operations suspended 1-12-60

Pin changed on location map   
 Affidavit and Record of A & P   
 Water Shut-Off Test   
 Gas-Oil Ratio Test   
 Well Log Filed



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Salt Lake City, Utah

Lease No. U 026532

Unit Soda

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

November 5, 1959

Well No. 1 is located 1900 ft. from N line and 1900 ft. from E line of sec. 2

S&W 2 (1/4 Sec. and Sec. No.) 40 S. (Twp.) 7 E. (Range) T. 13 N. (Meridian)  
Wildcat (Field) Kane (County or Subdivision) Utah (State or Territory)

The elevation of the derriek floor above sea level is 4900 ft. (approx. ground)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

1. Drill 13-3/4" hole to 700'.  
2. Cement 13-3/4", 40.5#, J-55 casing at 700' with 400 sacks cement last 200 sacks treated with calcium chloride.
3. Drill 9" hole to 7100'. (Objectives Pennsylvanian and Mississippian formations)
4. If commercial production is obtained a supplementary completion notice will be issued, otherwise plug and abandon.  
Surface formation is Jurassic - intrada.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address Post Office Box 135

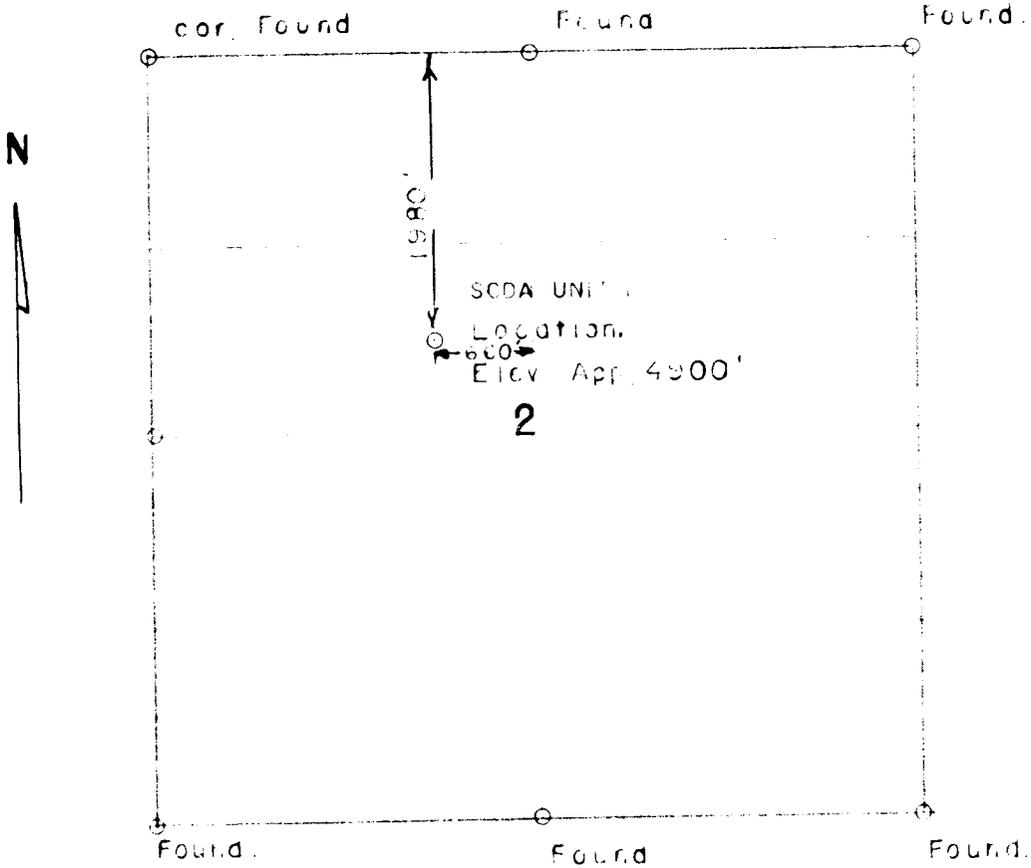
Farmington, New Mexico

By \_\_\_\_\_

E. W. Shepard  
Title Exploitation Engineer

TOWNSHIP 40 SOUTH, RANGE 7 EAST, S.L.M.

Section 2



Scale 1" = 1320'

SHELL OIL CO.

SECTION 2, TWP. 40S, R7E

KANE COUNTY, UTAH

10/8/59

John Bene, C.E.

No. 1050

Price, Utah.

*I John Bene, hereby certify that this plat was prepared from Notes of a Field Survey made by me, is true and correct to the best of my knowledge.*

*John Bene*

November 11, 1959

Shell Oil Company  
P. O. Box 158  
Farmington, New Mexico

Attention: Mr. B. W. Shepard,  
Exploitation Engineer

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Soda Unit 1, which is to be located 1980 feet from the north line and 1980 feet from the west line of Section 2, Township 40 South, Range 7 East, S1EM, Kane County, Utah.

Please be advised that insofar as this office is concerned approval to drill said well is hereby granted.

This approval terminates within 90 days if the above mentioned well is not spudded in within said period.

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT  
EXECUTIVE SECRETARY

CBF:co

cc: D. F. Russell, Dist. Eng.  
U. S. Geological Survey  
Salt Lake City, Utah

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake City, Utah  
LEASE NUMBER UO 26502  
UNIT Soda

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County Kane Field Wildcat - Soda Unit I

The following is a correct report of operations and production (including drilling and producing wells) for the month of November, 1959,

Agent's address Post Office Box 158 Company Shell Oil Company  
Farmington, New Mexico Signed \_\_\_\_\_

Phone Davis 5-8811 Agent's title Exploitation Engineer

SEC. AND ¼ OF ¼	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
2 SE NW	40S	7E	1	-	-	-	-	-	-	Spudded 11-20-59 Drilling at 2692 as of 11-30-59

NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold;  
No runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

(SUBMIT IN TRIPLICATE)

Land Office \_\_\_\_\_

Lease No. U-026502

Unit Soda

	X		
		2	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL.....		SUBSEQUENT REPORT OF WATER SHUT-OFF.....	X
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	X
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

December 2, 1959

Soda Unit  
Well No. 1 is located 1980 ft. from N line and 1900 ft. from W line of sec. 2  
SE 2 40 S 7 E 51EM  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Wildcat Kane Utah  
(Field) (County or Subdivision) (State or Territory)

The elevation of the ~~derrier~~ Kelly Dushing floor above sea level is 4767 ft.

**DETAILS OF WORK**

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

- Spudded 11-20-59
- 11-21-59 Cemented 2 jts. 16" conductor pipe at 85' with 100 sacks cement.
  - 11-26-59 Ran and cemented (1600') 10-3/4", 40.5# J-55 casing at 1610' with 500 sacks Diamix and 300 sacks cement, last 200 sacks treated with 2% calcium chloride. Good returns to surface. Flanged up and waited on cement. Pressure tested casing and BOP with 1000 psi for 30 minutes, OK.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address P. O. Box 158

Farmington, N. M.

By R. S. MacAllister, Jr.

Title Division Exploitation Engineer

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.5.  
Approval expires 12-31-60.  
Salt Lake City, Utah  
LAND OFFICE \_\_\_\_\_  
LEASE NUMBER UC 26502  
UNIT Soda

## LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Kane Field Wildcat - Soda Unit I

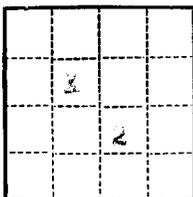
The following is a correct report of operations and production (including drilling and producing wells) for the month of December, 1959,

Agent's address Post Office Box 158 Company Shell Oil Company  
Farmington, New Mexico Signed R. S. Mac ALISTER, JR.  
Phone DAvis 5-8811 Agent's title Division Exploitation Engr.

SEC. AND ¼ OF ¼	TWP.	RANGE	WELL No.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
2 SE NW	40S	7E	1	-	-	-	-	-	-	Drilling 607' as of December 31, 1959

NOTE.—There were no runs or sales of oil; no M cu. ft. of gas sold;  
no runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Salt Lake City, Utah

Lease No. U 026232

Unit Soda

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....		SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

January 15, 1960

Soda Unit  
Well No. 1 is located 1980 ft. from N line and 1980 ft. from W line of sec. 2

SE 1/4 2 40 S. 7 E. S.L.R.M.  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Utah Kane Utah  
(Field) (County or Subdivision) (State or Territory)

The elevation of the Kelly bushing derrick floor above sea level is 4767 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Status: Total Depth 7155'  
Casing 10" - 65' and 10-3/4" 1610'  
Hole size 9" from 1610' to 7155'.

Proposed abandonment work:

- With open drill pipe plug as follows:
  - (a) 75 sacks cement 0050-0200
  - (b) 75 sacks cement 4390-5000
  - (c) 100 sacks cement 1535-1700
- Plug at surface with a 10 sack cement plug, install abandonment marker.

Note: Verbal approval to abandon given by D. F. Russell, I.G.S., to H. Sazarian 1-12-60.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address Post Office Box 150

Paria, Utah

Original  
R. S. Mac Allister, Jr.

By \_\_\_\_\_

R. S. Mac Allister, Jr.

Title Division Exploitation Engineer

*D. F. Russell*

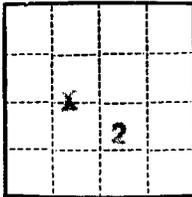
Land Office Salt Lake City, Utah

Lease No. 7-026502

Unit Soda

(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



*Handwritten initials/signature*

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....
NOTICE OF INTENTION TO ABANDON WELL.....	

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

..... January 27, ..... 1960

Well No. 2 <sup>Soda Unit</sup> is located 1980 ft. from N line and 1980 ft. from W line of sec. 2

2 (Sec. and Sec. No.)      103 (Twp.)      7 (Range)      114-00-01 (Meridian)  
Wildcat (Field)      None (County or Subdivision)      Utah (State or Territory)

The elevation of the ~~derisk floor~~ <sup>Kelly Bushing</sup> above sea level is 4767 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

1-14-60 DSI #1 6142-7155 (Mississippian Redwall) Initial shut in 30 minutes, open 2 hours. Final shut in 1 hour. Immediate strong blow decreasing to dead in 1-1/2 hours. Recovered 4900' (67 bbls.) muddy fresh water. ISIP 2130, IP 1905, FPP 2130', FSIP 2130, HP 2880.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address Post Office Box 158

Farrington, New Mexico

By H. W. McGarry, Jr.

Title Exploitation Engineer

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake City, Utah  
LEASE NUMBER NO 26502  
UNIT Soda

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County Kane Field Wildcat-Soda Unit I

The following is a correct report of operations and production (including drilling and producing wells) for the month of January, 1960,

Agent's address Post Office Box 158 Company Shell Oil Company  
Farmington, New Mexico Signed R. W. STEVENS

Phone Davis 5-8811 Agent's title Exploitation Engineer

SEC. AND ¼ OF ¼	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
2 SE NW	40S	7E	1	-	-	-	-	-	-	Drilled to total depth of 7155' Abandoned 1-16-60.

NOTE.—There were no runs or sales of oil; no M cu. ft. of gas sold;

no runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

U. S. LAND OFFICE Salt Lake City, Utah  
SERIAL NUMBER U 026502  
LEASE OR PERMIT TO PROSPECT .....

		X					
			2				

LOCATE WELL CORRECTLY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Shell Oil Company Address P.O. Box 158, Farmington, New Mexico  
 Lessor or Tract Federal - Soda Unit Field Wildcat State Utah  
 Well No. 1 Sec. 2 T. 40S R. 7E Meridian SLM County Kane  
 Location 1980 ft. XN. of N Line and 1980 ft. EW. of N Line of Section 2 Elevation 4767' KB  
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Original signed by  
Signed B. W. SHIPARD

Date February 9, 1960 Title Exploitation Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling November 20, 1959 Finished drilling January 13, 1960

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from None to ..... No. 4, from ..... to .....  
 No. 2, from ..... to ..... No. 5, from ..... to .....  
 No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

No. 1, from None noted to ..... No. 3, from ..... to .....  
 No. 2, from ..... to ..... No. 4, from ..... to .....

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From-	To-	
13-3/4	85	8	Waco	45	Ball	Surface			Surface pipe
10-3/4	1610	8	Waco	800	Ball	Surface			Surface pipe

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/4	85'	100	Displacement		
10-3/4	1610'	800	Displacement		

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....  
 Adapters—Material ..... Size .....

SHOOTING RECORD

FOLD MARK

FOUR MA

**PLUGS AND ADAPTERS**

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
 Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

**SHOOTING RECORD**

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

**TOOLS USED**

Rotary tools were used from 0 feet to 7155 feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
 Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

**DATES**

Plugged and abandoned January 16, 1960 Put to producing \_\_\_\_\_, 19\_\_\_\_  
 The production for the first 24 hours was \_\_\_\_\_ barrels of fluid of which \_\_\_\_\_% was oil; \_\_\_\_\_% emulsion; \_\_\_\_\_% water; and \_\_\_\_\_% sediment. Gravity, °Bé. \_\_\_\_\_  
 If gas well, cu. ft. per 24 hours \_\_\_\_\_ Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_  
 Rock pressure, lbs. per sq. in. \_\_\_\_\_

**EMPLOYEES**

\_\_\_\_\_, Driller Great Western Drilling Company, Driller  
 \_\_\_\_\_, Driller \_\_\_\_\_, Driller

**FORMATION RECORD**

FROM—	TO—	TOTAL FEET	FORMATION
Surface	108	108	Entrada
108?	276	168	Carmel
276	1509	1233	Navajo
1509	1762	253	Kayenta
1762	2070	308	Wingate
2070	2673	603	Chinle
2673	2813	140	Shinarump
2813	3040	227	Moenkopi
3040	3085	45	Kaibab
3085	3418	333	Coconino
3418	3947	529	Hermit
3947	5348?	1401	Supai
5348?	5921?	573	Hermosa
5921?	6121	200	Molas
6121	6725?	604	Redwall
6725?	6960	235	Ouray
6960	-		Elbert

FEB 11 1960

2



**DRILLING REPORT**  
FOR PERIOD ENDING

12-20-59

Wildcat

(FIELD)

Kane County, Utah

(COUNTY)

Section 2

(SECTION OR LEASE)

T. 40 S., R. 7 E.

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
			<p><u>Location:</u> 1980' S., 1980' E., of NW corner, Section 2, T. 40 S., R. 7 E., S.L.M., Kane County, Utah</p> <p><u>Elevation:</u> K.B. 4766.6' Grd. 4757.1' D.F. 4765'</p> <p>Spudded 5:00 P.M., 11-20-59</p>
11-20 to 11-21	0	85	Drilled 13-3/4" to 85'. Reamed to 20". Ran and cemented 16" conductor with 100 sacks.
11-22 to 11-26	85	1610	Drilled 13-3/4" out of conductor at 8:00 A.M.
11-27	1610		Cemented 10-3/4" 40.5# casing at 1610' with 500 sacks, 1-1 Diamix with 4% gel. followed by 300 sacks neat. Last 200 sacks neat treated 2% CaCl <sub>2</sub> . Good returns at surface.
			Flanged up and pressure tested casing to 2800 psi for 20 min., O.K.
11-28 to 12-12	1610	5058	Drilled 9" hole. Lost + 350 bbls. mud at 5010' while going in hole. Added lost circulation material.
12-13 to 12-14	5058	5214	Drilled 9" hole. Stuck pipe at + 4500' while coming out of the hole. Worked loose.
12-15 to 12-17	5214	5416	Drilled and cored 9" hole. Core #1 5358' to 5380', cored 22', recovered 22'
12-18 to 12-20	5416	5520	Drilled 9" hole. Lost + 350 bbls. mud at 5431' and 1000+ bbls. mud at 5463'. Drilling with partial returns (80%)

CONDITION AT BEGINNING OF PERIOD

HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
20"	0	85	16"	85
13-3/4"	85	1610	10-3/4"	1610
9"	1610	5520		
DRILL PIPE SIZES 4 1/2" F.H.				

J. D. McLehaney

SIGNED

**DRILLING REPORT**  
FOR PERIOD ENDING

1-13-60

Wildcat

(FIELD)

Kane County, Utah

(COUNTY)

Section 2

(SECTION OR LEASE)

T. 40 S., R. 7 E.

(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
12-21 to 12-26	5520	5758	Drilled 9" hole. Lost 4200+ bbls. mud as follows: 1000+ bbls. 5579' to 5609' 500+ bbls. 5609' to 5613' 500+ bbls. 5613' to 5632' 600+ bbls. 5632' to 5652' 500+ bbls. 5652' to 5694' 600+ bbls. 5694' to 5702' 500+ bbls. 5702' to 5709'
12-27 to 12-31	5758	6041	Drilled 9" hole. Lost 1400+ bbls. mud as follows: 200+ bbls. 5758' to 5846' 200+ bbls. 5846' to 5912' 100+ bbls. 5912' to 5961' 400+ bbls. 5961' to 5997' 400+ bbls. 5997' to 6022' 100+ bbls. 6022' to 6041'
1-1-60 to 1-3	6041	6431	Drilled 9" hole. Lost 2600+ bbls. mud as follows: 100+ bbls. 6041' to 6080' 300+ bbls. 6080' to 6112' 400+ bbls. 6112' to 6140' 800+ bbls. 6187' to 6238' 1000+ bbls. 6238' to 6332' Losing circulation 6332' to 6431'.
1-4 to 1-6	6431	6733	Drilled 9" hole. Lost 700+ bbls. mud at 6650' to 6686'
1-7 to 1-8	6733	6928	Drilled 9" hole. Losing circulation
1-9 to 1-13	6928	7155	Drilled 9" hole. Lost 800+ bbls. mud as follows: 200+ bbls. 6982' to 7043' 100+ bbls. 7043' to 7125' 500+ bbls. 7125' to 7155' Ran Schlumberger IES, GRN and ML. Schlumberger ML sonde stuck at 4980'. Pulled loose at shear point and pushed sonde to bottom

CONDITION AT BEGINNING OF PERIOD

HOLE			CASING SIZE	DEPTH SET
SIZE	FROM	TO		
20"	0	85	16"	85
13-3/4"	85	1610	10-3/4"	1610
9"	1610	7155		
DRILL PIPE 1 1/2" F.H. SIZES 1 1/2"				

J. D. McLehaney

SIGNED

Wildcat

**DRILLING REPORT**  
FOR PERIOD ENDING

Section 2

(FIELD)  
Kane County, Utah  
(COUNTY)

1-16-60

(SECTION OR LEASE)  
T. 40 S., R. 7 E.  
(TOWNSHIP OR RANCHO)

DAY	DEPTHS		REMARKS
	FROM	TO	
1-14			DST No. 1 - 6142-7155', hydrology test. Ran Halliburton hookwall tester with two 8" expanding shoe packers set at 6137' and 6142', 78' of tail pipe, 3 outside type Amerada pressure recorders, #256 @ 6176', #812 @ 6181', and #814 @ 6186'. CIP rotating type valve at 6120'. Volume of rat hole below packers = 79 bbls. No air or water cushion. Initial open period of 3 min. followed by 30 min. initial shut-in time. Opened tester at 7:42 A.M. with immediate strong blow, gradually decreasing to dead after 1 hr. 30 min., and remained dead for remainder of 2 hr. flow period. Final shut-in period was 1 hr. Pulled tester loose at 10:42 A.M. Total recovery was 4900' (67 bbls.) of muddy water. Maximum salinity was 2500 ppm NaCl(T). Mud salinity before test was 1000 ppm NaCl(T). ISIP (30 min.) 2104, IFP 1885, FFP 2111, FSIP (60 min.) 2111, nearly stabilized, HP 2880.
1-15		7155	Ran Schlumberger integrated Sonic Log and Century CVS with check shots. Recovered microlog sonde except 10" bull nose with Bowen overshot. Plugged at 6200' with 75 sacks class A cement. Plugged at 5000' with 75 sacks class A cement. Plugged at shoe of surface casing (1610'+) with 140 sacks class A cement.
1-16		7155	Found top of plug at 1510'. Plugged surface with 10 sacks. Installed marker. Released rig at 6:00 P.M. on 1-16-60. Plugged and abandoned 1-16-60.

Great Western Drilling Co.

Contract Drilling Foreman  
D. Beard

Shell Drilling Foreman  
C. L. Christiansen

CONDITION AT BEGINNING OF PERIOD				
HOLE			CASINO SIZE	DEPTH SET
SIZE	FROM	TO		
20"	0	85	16"	85
13-3/8"	85	1610	10-3/4"	1610
9"	1610	7155		
DRILL PIPE SIZES 4 1/2" F.H.				

J. D. McLehaney

SIGNED

## DITCH SAMPLES

Examined by McLehane 85 to 790  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
85	110	100	<u>Sandstone</u> , red, very fine-fine, gypsiferous, slightly calcareous, mostly cavings?	
110	140	80	<u>Sandstone</u> , red and gray, very fine-fine, gypsiferous	
		20	<u>Shale</u> , red and light green, silty and sandy, slightly calcareous	
140	160	70	<u>Sandstone</u> , as above	
		30	<u>Shale</u> , as above	
160	230	100	<u>Shale</u> , red, occasional gray and light green, silty in part (not calcareous)	
230	240	100	<u>Shale</u> , as above, slightly sandy, slightly calcareous	
240	260	100	<u>Shale</u> , as above, gypsiferous inclusions	
260	270	100	<u>Shale</u> , as above, not calcareous, no gypsum	
270	280	90	<u>Shale</u> , as above	
		10	<u>Sandstone</u> , light tan, very fine-fine, well sorted, well rounded, slightly frosted, friable	
280	290	80	<u>Shale</u> , as above	
		20	<u>Sandstone</u> , as above	
290	380	100	<u>Sandstone</u> , as above	
380	410	100	<u>Sandstone</u> , as above, slightly silty	
410	430	100	<u>Sandstone</u> , as above, fair sorting, cement, slightly calcareous	
430	510	100	<u>Sandstone</u> , as above, good sorting, fair cementing	
510	540	100	<u>Sandstone</u> , as above, fair-good cementing, slightly calcareous	
540	550	100	<u>Sandstone</u> , as above, fair-poor cementing	
550	570	100	<u>Sandstone</u> , as above, fair-good cementing, slightly calcareous	
570	610	100	<u>Sandstone</u> , as above, fair-poor cementing	
610	630	100	<u>Sandstone</u> , as above, fair cementing, slightly calcareous	
630	700	100	<u>Sandstone</u> , as above, slightly silty	
700	730	100	<u>Sandstone</u> , as above, (some cavings?)	
730	750	100	<u>Sandstone</u> , as above, occasional gypsiferous bands	
750	790	100	<u>Sandstone</u> , as above, fair-good cementing	

## DITCH SAMPLES

Examined by McLehane 790 to 1610  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Net)
790	810	100	<u>Sandstone</u> , as above, (some cavings?)	
810	930	100	<u>Sandstone</u> , as above, good cementing	
930	950	100	<u>Sandstone</u> , as above, very fine, well sorted	
950	1040	100	<u>Sandstone</u> , light tan, very fine-fine, well sorted, well rounded, good cementing, slightly frosted, friable	
1040	1050	100	<u>Sandstone</u> , as above, occasional medium grains	
1050	1060	100	<u>Sandstone</u> , as above, slightly silty	
1060	1190	100	<u>Sandstone</u> , as above, very fine-fine, no silt	
1190	1200	100	<u>Sandstone</u> , as above, light tan to light pink, fair-good cementing	
1200	1300	100	<u>Sandstone</u> , as above, light tan to light red, very fine-fine, occasional medium grains, well rounded, fair-poor cementing, very slightly frosted, fine sorting	
1300	1350	100	<u>Sandstone</u> , as above, light red, very fine-medium, fair-poor sorting, well rounded, fair-poor cementing, very slightly frosted	
1350	1360	100	<u>Sandstone</u> , as above, becoming redder	
1360	1400	100	<u>Sandstone</u> , as above, slightly calcareous	
1400	1450	100	<u>Sandstone</u> , light red-red, very fine-medium, fair-poor sorting, well rounded, very slightly frosted, fair cementing, slightly calcareous, firm to slightly friable, silty in part	
1450	1480	100	<u>Sandstone</u> , as above, white-light red	
1480	1510	100	<u>Sandstone</u> , as above, light tan to light red, calcareous	
1510	1520	100	<u>Sandstone</u> , as above, white to light red	
1520	1540	100	<u>Sandstone</u> , as above, occasional chert fragments	
1540	1560	100	<u>Sandstone</u> , as above, occasional <u>siltstone</u> , gray, grading from fine to coarse, calcareous	
1560	1570	100	<u>Sandstone</u> , as above, <u>siltstone</u> , as above, micaceous	
1570	1590	100	<u>Sandstone</u> , as above, <u>siltstone</u> , as above, occasional <u>siltstone</u> red, grading from coarse to fine, containing occasional quartz fragments, compact, micaceous	
1590	1610	100	<u>Sandstone</u> , as above, <u>siltstone</u> , as above, no mica	

## DITCH SAMPLES

Examined by McLehaneey 1610 to 2220  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
1610	1620	60	<u>Sandstone</u> , white-light red, very fine-medium, fine sorting, firm, fair-good cementing, well rounded, slightly calcareous, occasional quartz with mica	
		40	<u>Siltstone</u> , light tan-light green, calcareous, occasional quartz grains with mica, varies from soft to firm	
1620	1630	30	<u>Sandstone</u> , as above	
		70	<u>Siltstone</u> , as above	
1630	1640	10	<u>Sandstone</u> , as above	
		90	<u>Siltstone</u> , as above	
1640	1650	10	<u>Sandstone</u> , as above, light pink to light red	
		90	<u>Siltstone</u> , as above, occasional f-l quartz grains, angular - sub-angular	
1650	1660	5	<u>Sandstone</u> , as above	
		95	<u>Siltstone</u> , as above	
1660	1670	10	<u>Sandstone</u> , as above	
		90	<u>Siltstone</u> , as above	
1670	1680	15	<u>Sandstone</u> , as above	
		85	<u>Siltstone</u> , as above	
1680	1700	40	<u>Sandstone</u> , as above	
		60	<u>Siltstone</u> , as above	
1700	1710	30	<u>Sandstone</u> , as above	
		70	<u>Siltstone</u> , as above	
1710	1720	10	<u>Sandstone</u> , as above, red, very fine, well sorted, sub-angular, fair cementing, calcareous	
		90	<u>Siltstone</u> , as above	
1720	1780	100	<u>Sandstone</u> , as above	
1780	2070	100	<u>Sandstone</u> , as above, red-orange	
2070	2080	50	<u>Sandstone</u> , as above	
		50	<u>Siltstone</u> , grading to shale, light tan-light red, very fine-silty, fair cementing, firm, calcareous-dolomitic, slightly cherty, occasional sand grains	
2080	2090	40	<u>Sandstone</u> , as above	
		60	<u>Siltstone</u> , as above	
2090	2100	30	<u>Sandstone</u> , as above	
		70	<u>Siltstone</u> , as above	
2100	2180	100	<u>Siltstone</u> , as above, occasional light green mottling	
2180	2220	100	<u>Siltstone</u> , as above, light tan-light red, increasing light green	

## DITCH SAMPLES

Examined by McLehane 2220 to 2510  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
2220	2330	100	<u>Siltstone</u> , as above, light green-light red, red grading to shale, anhydritic, calcareous, dolomitic mottling	
2330	2350	100	<u>Siltstone</u> , red with pink and light green, grading to shale, fair cementing, firm, anhydritic, calcareous-dolomitic, mottling, occasional sand grains	
2350	2360	60 40	<u>Siltstone</u> , as above <u>Sandstone</u> , grading toward conglomerate, light pink-light red, fine-coarse, fair-good cementing, firm, slightly calcareous with mica, chlorite	
2360	2370	50 50	<u>Siltstone</u> , as above <u>Sandstone</u> , as above	
2370	2380	40 60	<u>Siltstone</u> , as above <u>Sandstone</u> , as above	
2380	2390	60 40	<u>Siltstone</u> , as above <u>Sandstone</u> , as above	
2390	2400	60 40	<u>Siltstone</u> , as above <u>Sandstone</u> , as above, light green-light red, matrix partly silty	
2400	2410	70 30	<u>Siltstone</u> , as above, pink-red, calcareous-dolomitic, mottling <u>Sandstone</u> , as above, light pink-light red, calcareous-dolomitic, pyritic, hematite	
2410	2420	80 20	<u>Siltstone</u> , as above <u>Sandstone</u> , as above	
2420	2430	100	<u>Siltstone</u> , as above, maroon, very shaly	
2430	2440	80 20	<u>Shale</u> , light pink, maroon, with light green mottling, slightly silty, calcareous-dolomitic, fair-good cementing, firm <u>Sandstone</u> , light pink, silty, calcareous-dolomitic, gray calcareous pebbles	
2440	2450	90 10	<u>Shale</u> , as above, pyritic, slightly carbonaceous material <u>Sandstone</u> , as above	
2450	2460	90 10	<u>Shale</u> , as above, increasing carbonaceous material <u>Sandstone</u> , as above	
2460	2470	90 10	<u>Shale</u> , as above, slight carbonaceous material <u>Sandstone</u> , as above	
2470	2500	100	<u>Shale</u> , as above	
2500	2510	100	<u>Shale</u> , as above, gray, purple, calcareous, fair-poor cementing, soft with fine sand grains	

## DITCH SAMPLES

Examined by McLehane 2510 to 2900  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
2510	2520	100	<u>Shale</u> , as above, purple, maroon	
2520	2540	100	<u>Shale</u> , as above, light red with green mottling, calcareous-dolomitic	
2540	2570	100	<u>Shale</u> , as above, light red, maroon with light green mottling, slightly silty	
2570	2580	100	<u>Shale</u> , as above, light red, maroon, light green	
2580	2590	100	<u>Shale</u> , as above, light green, with red and maroon, slightly carbonaceous material, pyritic	
2590	2600	100	<u>Shale</u> , as above, pyritic	
2600	2620	100	<u>Shale</u> , light pink, maroon, with green mot., calcareous-dolomitic, fair-good cementing, firm, slightly silty, carbonaceous mot., micaceous, pyritic	
2620	2640	100	<u>Shale</u> , as above, light green grades to silt	
2640	2650	100	<u>Shale</u> , as above, grading to silt	
2650	2660	100	<u>Shale</u> , as above, light green and light brown, grades to silt	
2660	2670	100	<u>Shale</u> , as above, grading to silt, pyritic, anhydritic	
2670	2680	90 10	<u>Shale</u> , as above <u>Sandstone</u> , white-tan, very fine, sub-angular, well cemented, firm, well sorted, calcareous	
2680	2690	80 20	<u>Siltstone</u> , light green, maroon-red, grading to very fine sandstone, fair cementing, calcareous-dolomitic, carbonaceous mottling, pyritic <u>Sandstone</u> , as above	
2690	2700	80 20	<u>Siltstone</u> , as above <u>Sandstone</u> , as above, very fine-coarse, fair-poor sorting	
2700	2810	100	<u>Sandstone</u> , white-tan, very fine-coarse, grading to conglomerate, sub-angular, poor sorting, well cemented, firm, calcareous	
2810	2820	90 10	<u>Sandstone</u> , as above <u>Sandstone</u> , brown, very fine-silty, fair-good sorting, fair cementing, fairly soft, dolomitic, very micaceous (muscovite)	
2820	2830	100	<u>Sandstone</u> , as above, brown, very fine-silty	
2830	2890	100	<u>Sandstone</u> , as above, tan-brown, micaceous	
2890	2900	100	<u>Sandstone</u> , as above, fair-good cementing, firm	

## DITCH SAMPLES

Examined by McLehane 2900 to 4600  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
2900	3060	100	<u>Sandstone</u> , as above, very fine-silty	
3060	3070	60 40	<u>Sandstone</u> , as above <u>Chert</u> , white, slightly dolomitic, brown spotty oil stain, about 2%, poor fluorescence, good cut fluorescence, odor on fresh sample, no gas on gas analyzer	
3070	3080	100	<u>Dolomite</u> , white C III B, cherty, good porosity, <u>brown-black oil stain</u> , no odor, poor fluorescence, good cut fluorescence.	
3080	3090	90 10	<u>Dolomite</u> , as above, slightly sandy <u>Sandstone</u> , white, very fine-fine, sub-rounded, fair-poor cementing, poor sorting, dolomitic, fair porosity, <u>brown-black oil stain</u> , poor fluorescence, fair cut fluorescence	
3090	3430	100	<u>Sandstone</u> , as above, sub-rounded to sub-angular, fair cementing, firm, fair porosity	
3430	3440	50 50	<u>Sandstone</u> , as above <u>Siltstone</u> , white-tan, fair cementing, firm, dolomitic, some quartz	
3440	3450	100	<u>Siltstone</u> , as above	
3450	3570	100	<u>Siltstone</u> , as above, light red	
3570	3590	100	<u>Siltstone</u> , as above, light tan to light red	
3590	3690	100	<u>Siltstone</u> , light red, fair cementing, firm, dolomitic, quartzitic	
3690	3940	100	<u>Siltstone</u> , as above, light tan to light red	
3940	3950	70 30	<u>Siltstone</u> , as above <u>Sandstone</u> , tan, very fine to silty, sub-rounded to sub-angular, fair-poor cementing, friable, fair-good sorting, slightly dolomitic, fair porosity	
3950	3960	100	<u>Sandstone</u> , as above, white to tan	
3960	4020	100	<u>Sandstone</u> , as above, white, very fine to fine	
4020	4030	100	<u>Sandstone</u> , as above, carbonaceous mottling	
4030	4040	100	<u>Sandstone</u> , as above, slight amount carbonaceous mottling	
4040	4460	100	<u>Sandstone</u> , as above, no carbonaceous mottling	
4460	4520	100	<u>Sandstone</u> , as above, white to tan	
4520	4540	100	<u>Sandstone</u> , as above, light tan	
4540	4600	100	<u>Sandstone</u> , as above, white	

## DITCH SAMPLES

Examined by McLehane 4600 to 5210  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
4600	4700	100	<u>Sandstone</u> , as above, white to light tan	
4700	4770	100	<u>Sandstone</u> , as above, light tan to light red, occasionally white	
4770	4800	100	<u>Sandstone</u> , as above, poor porosity	
4800	4810	90	<u>Sandstone</u> , as above, poor porosity	
		10	<u>Siltstone</u> , brown, dolomitic, fair cementing, firm	
4810	4820	50	<u>Sandstone</u> , as above	
		50	<u>Siltstone</u> , as above	
4820	4840	40	<u>Sandstone</u> , as above	
		60	<u>Siltstone</u> , as above	
4840	4850	90	<u>Sandstone</u> , as above	
		10	<u>Siltstone</u> , as above	
4850	4870	100	<u>Sandstone</u> , as above	
4870	4920	100	<u>Sandstone</u> , as above, white to light tan, fair porosity	
4920	4950	100	<u>Sandstone</u> , as above, grading to white	
4950	5000	100	<u>Sandstone</u> , as above, white, occasionally light tan	
5000	5100	100	<u>Sandstone</u> , white, fine, quartzitic, slightly friable, sub-angular - sub-rounded, fair sorting, poor porosity, compacted - dolomitic cement	
5100	5110	100	<u>Sandstone</u> , as above, with streaks of pink very fine-fine quartzitic sandstone	
5110	5150	100	<u>Sandstone</u> , as above, very fine-fine, with streaks of pink very fine-fine quartzitic sandstone	
5150	5160	50	<u>Sandstone</u> , as above, very fine-fine	
		50	<u>Sandstone</u> , pink, very fine-fine, quartzitic, fair sorting, sub-angular - sub-rounded grains, very slightly friable, calcareous cement, poor porosity (0-X)	
5160	5180	100	<u>Sandstone</u> , pink, very fine-fine, quartzitic, fair sorting, sub-angular - sub-rounded grains, very slightly friable, poor porosity (0-X), dolomitic cement	
5180	5210	100	<u>Sandstone</u> , white with pink streaks, quartzitic, slightly friable, poor-fair porosity, sub-angular - sub-rounded grains, fair sorting, dolomitic cement	

## DITCH SAMPLES

Examined by McLehaney 5210 to 5660  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
5210	5240	100	Sandstone, pink with white, very fine-fine, quartzitic, poor porosity, slightly friable, calcareous cement, sub-angular - sub-rounded grains, fair sorting	
5240	5250	100	Sandstone, as above, with scattered rounded medium quartz grains	
5250	5270	100	Sandstone, as above	
5270	5310	100	Sandstone, pink, silty-very fine, quartzitic, sub-angular - sub-rounded grains, fair sorting, calcareous cement 10%, tight	
5310	5320	100	Sandstone, as above, with interbedded white fine quartzitic sandstone	
5320	5340	100	Sandstone, light red, silty-very fine, quartzitic, sub-angular - sub-rounded grains, fair sorting, friable, fair porosity, calcareous cement	
5340	5350	65	Sandstone, white, very fine-medium, quartzitic, sub-rounded grains, fair sorting, poor-fair porosity	
		35	Limestone, light gray, IVFA (pellets)	
5350	5358	90	Limestone, light tan and cream, IVFA, floating rounded fine-medium quartz grains, (pellets)	
		10	Sandstone, as above	
<u>CORE #1 - 5358-5380'</u>				
5380	5390	60	Limestone, light gray - light red, IVFA	
		40	Shale, maroon, slightly calcareous	
5390	5410	100	Siltstone, maroon - red brown, quartzitic, micaceous, sandy with light red quartz sandstone parting	
5410	5420	60	Sandstone, white, very fine, quartzitic, sub-rounded grains, fair sorting, hard calcareous cement, tight	
		40	Siltstone, as above	
5420	5430	50	Siltstone, as above	
		30	Sandstone, as above	
		20	Shale, maroon	
5430	5520	100	Sandstone, pink and white, fine, quartzitic, sub-rounded grains, fair-good sorting, hard dolomitic cement, tight	
5520	5540	100	Sandstone, as above, occasionally slightly silty	
5540	5640	100	Sandstone, as above	
5640	5660	20	Sandstone, as above	
		80	Limestone, cream-light tan, IVFA, dolomitic, fossiliferous, possible crinoid fragments	

## DITCH SAMPLES

Examined by McLehaney 5660 to 5860  
\_\_\_\_\_ to \_\_\_\_\_Well, Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
5660	5670	100	<u>Sandstone</u> , as above, light pink-maroon, calcareous	
5670	5680	20	<u>Dolomite</u> , white-cream, IVFA	
		80	<u>Sandstone</u> , as above	
5680	5690	50	<u>Limestone</u> , cream-pink, IVFA	
		50	<u>Sandstone</u> , as above	
5690	5700	-	No sample	
5700	5720	100	<u>Siltstone</u> , light pink-maroon, dolomitic cementing, firm	
5720	5730	10	<u>Siltstone</u> , as above	
		90	<u>Sandstone</u> , white-light tan, very fine, dolomitic cementing, firm, well sorted, sub-rounded-rounded	
5730	5740	100	<u>Sandstone</u> , as above	
5740	5760	100	<u>Sandstone</u> , as above, white, with dolomite partings, IVFA	
5760	5770	100	<u>Sandstone</u> , as above, light pink-maroon, with interbedded dolomite, (approximately 20%), IVFA	
5770	5780	100	<u>Limestone</u> , light gray, IVFA, tight with quartz grains, well rounded	
5780	5790	80	<u>Limestone</u> , as above, white, dolomitic, fossils	
		20	<u>Siltstone</u> , red-purple, dolomitic, firm, slightly micaceous	
5790	5800	60	<u>Limestone</u> , white, IVFA, tight, quartz grains, well rounded, fossils	
		40	<u>Sandstone</u> , red-purple, silty-very fine, sub-rounded, dolomitic cementing, firm	
			<u>5 foot samples taken beginning at 5800'</u>	
5800	5805	100	<u>Sandstone</u> , as above, red-purple	
5805	5810	100	<u>Sandstone</u> , as above, red-orange	
5810	5815	100	<u>Sandstone</u> , as above, cream-orange, very calcareous and dolomitic	
5815	5835	100	<u>Siltstone</u> , white, very calcareous and dolomitic, with limestone, IVFA, firm, fossiliferous	
5835	5845	100	<u>Siltstone</u> , as above, slightly sandy	
5845	5850	100	<u>Sandstone</u> , white-pink, silty-very fine, sub-rounded, dolomitic cementing, firm	
5850	5860	100	<u>Limestone</u> , white, I-IIVFA, fossiliferous	

## DITCH SAMPLES

Examined by McLehaney 5860 to 6180  
\_\_\_\_\_ to \_\_\_\_\_Well Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
5860	5880	100	<u>Dolomite</u> , white, IIIMA, dense and hard, tight	
5880	5890	80	<u>Dolomite</u> , as above, white-gray	
		20	<u>Siltstone</u> , tan-brown, dolomitic cementing, firm (probable parting)	
5890	5900	70	<u>Siltstone</u> , as above, chert fragments	
		30	<u>Dolomite</u> , as above, calcareous, fossiliferous	
5900	5910	100	<u>Dolomite</u> , white-gray, IIIVF-FA, white, dolomitic parting, brown silt parting (15%)	
5910	5920	100	<u>Dolomite</u> , as above, increasing silt parting (25%), chert fragments	
5920	5930	50	<u>Dolomite</u> , as above, silty	
		50	<u>Siltstone</u> , brown-maroon, dolomitic cementing, firm, chert fragments	
5930	5940	60	<u>Siltstone</u> , as above	
		40	<u>Dolomite</u> , as above	
5940	5960	100	<u>Siltstone</u> , as above, with dolomitic partings	
5960	5970	100	<u>Siltstone</u> , as above, grading to shale	
5970	6000	100	<u>Shale</u> , maroon, slightly dolomitic, soft, dolomitic partings	
6000	6010	100	<u>Shale</u> , as above, chert fragments	
6010	6020	10	<u>Dolomite</u> , cream-gray, IVFA, slightly calcareous	
		90	<u>Shale</u> , as above, with increasing chert	
6020	6030	75	<u>Dolomite</u> , as above	
		25	<u>Shale</u> , as above	
6030	6040	60	<u>Dolomite</u> , cream-gray, IVFA, slightly calcareous	
		40	<u>Shale</u> , maroon, slightly dolomitic, soft, chert fragments	
6040	6070	50	<u>Dolomite</u> , as above	
		50	<u>Shale</u> , as above, with increasing chert fragments	
6070	6090	100	<u>Shale</u> , as above, with dolomitic (aa) partings	
6090	6100	100	<u>Shale</u> , as above, grading to silt	
6100	6110	100	<u>Shale</u> , as above	
6110	6130	100	<u>Shale</u> , as above, with clay mottling	
6130	6140	70	<u>Dolomite</u> , tan-gray, IVFA, firm	
		30	<u>Shale</u> , as above, with clay mottling	
6140	6180	100	<u>Dolomite</u> , as above, occasional pelletoid, with maroon shale partings	

## DITCH SAMPLES

Examined by McLehaney 6180 to 6550  
Woodward 6550 to 6640

Well Soda Unit 1  
 Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
6180	6230	100	<u>Limestone</u> , tan-gray, IVFA, firm, occasional pelletoid with clay mottling	
6230	6240	100	<u>Limestone</u> , as above, white	
6240	6280	100	<u>Dolomite</u> , white-gray, IVFA	
6280	7290	100	<u>Dolomite</u> , as above, with trace dolomite, IIMA-B	
6290	6310	100	<u>Dolomite</u> , IIMA, trace B, white-gray	
6310	6330	.	No sample	
6330	6340	100	<u>Dolomite</u> , as above, white	
6340	6370	100	<u>Dolomite</u> , as above, white, III F-M A-B, fair porosity	
6370	6380	100	<u>Dolomite</u> , as above, IIMA-B	
6380	6410	100	<u>Dolomite</u> , as above, white-tan, III F-M A-B, fair porosity	
6410	6420	100	<u>Dolomite</u> , as above	
6420	6430	100	<u>Dolomite</u> , as above, pyritic	
6430	6440	100	<u>Dolomite</u> , as above, pyritic	
6440	6490	100	<u>Dolomite</u> , as above	
6490	6500	100	<u>Dolomite</u> , as above	
6500	6510	100	<u>Dolomite</u> , as above	
6510	6530	100	<u>Dolomite</u> , as above	
6530	6550	100	<u>Dolomite</u> , as above, pyritic	
6550	6590	100	<u>Dolomite</u> , light tan and white, III VF-M (B, C & D) 5-10, with dolomite white, IM-C (C & D) 3-6 (vug filling?)	
6590	6600	95 5	<u>Dolomite</u> , as above <u>Chert</u> , white and light brown	
6600	6610	100	<u>Dolomite</u> , white and light tan, III VF-F (B, D & D) 3-6, with dolomite, white IF-M (C & D) 2-4 (vug filling?)	
6610	6620	85 15	<u>Dolomite</u> , as above <u>Chert</u> , white	
6620	6640	100	<u>Dolomite</u> , as above	

## DITCH SAMPLES

Examined by Woodward 6640 to 6920  
\_\_\_\_\_ to \_\_\_\_\_Well. Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Net)
6640	6650	95 5	<u>Dolomite</u> , as above <u>Chert</u> , white	
6650	6660	100	<u>Dolomite</u> , light tan and white, IIIIVF (B, C & D) 4-8 with dolomite, white, IF-M (C & D) 2-8 (vug filling?) with trace chert and anhydrite	
6660	6680	85 15	<u>Dolomite</u> , white and tan IIIIVF (B, C & D) 3-6 with dolomite, white, IF-M (C & D) 2-4 with trace chert <u>Shale</u> , gray green	
6680	6700	95 5	<u>Dolomite</u> , as above, IIIIVF-F (B, C & D) 2-4 <u>Chert</u> , white	
6700	6710	100	<u>Dolomite</u> , light tan and white, IIIIVF-F (B & C) 0-2 with minor dolomite, white, IF-M (C) 0-2, with trace chert and anhydrite	
6710	6720	100	<u>Dolomite</u> , as above (B & C) 4-6	
6720	6730	80 20	<u>Dolomite</u> , as above (B & C) 2-4 <u>Limestone</u> , tan, IVFA, pseudo-oolitic and oolitic	
6730	6750	100	<u>Dolomite</u> , light brown, IVFA, 30% calcareous	
6750	6760	100	<u>Limestone</u> , light brown, IVFA, 40% dolomitic, pseudo-oolitic and oolitic	
6760	6780	100	<u>Dolomite</u> , cream and brown, IVFA, 40% limestone, pseudo-oolitic and oolitic	
6780	6820	100	<u>Limestone</u> , cream and tan, IVFA, 20% dolomitic	
6820	6830	80 20	<u>Limestone</u> , as above <u>Dolomite</u> , cream, IIIIVFA	
6830	6840	60 40	<u>Limestone</u> , as above <u>Dolomite</u> , light tan, I/IIIIVFA	
6840	6860	100	<u>Dolomite</u> , light tan and cream, I/IIIIVFA (B & C) tr. 20% calcareous	
6860	6880	100	<u>Limestone</u> , cream and light brown, I/IIIIVFA, 40% dolomitic	
6880	6890	20 60 20	<u>Limestone</u> , as above <u>Dolomite</u> , gray, I/IIIIVFA, 30% calcareous <u>Shale</u> , light red	
6890	6900	30 70	<u>Dolomite</u> , as above <u>Limestone</u> , as above	
6900	6910	90 10	<u>Limestone</u> , gray and brown, IVFA, lithographic, 30% dolomitic <u>Shale</u> , green and red	
6910	6920	70 30	<u>Shale</u> , gray green <u>Limestone</u> , as above	

## DITCH SAMPLES

Examined by Woodward 6920 to 7155 (T.D.)  
\_\_\_\_\_ to \_\_\_\_\_Well. Soda Unit 1  
Field or Area Kane County, Utah

From	To	%	Shows Underlined	Samples Lagged (Not)
6920	6930	70	<u>Shale</u> , maroon and light purple with green	
		30	<u>Dolomite</u> , cream, IIIVFA	
6930	6950	70	<u>Dolomite</u> , as above	
		30	<u>Shale</u> , green and maroon	
6950	6970	60	<u>Dolomite</u> , white and brown, IIIVFA	
		30	<u>Shale</u> , maroon and green	
		10	<u>Sandstone</u> , white, quartzitic, tight	
6970	6980	70	<u>Dolomite</u> , as above, I/IIIIVF-FA	
		30	<u>Shale</u> , as above	
6980	7000	80	<u>Dolomite</u> , white and brown, I/IIIIVF-FA with scattered floating quartz grains (6990-7000)	
		20	<u>Shale</u> , as above	
7000	7010	70	<u>Dolomite</u> , white and brown, IVFA with scattered floating quartz grains	
		30	<u>Shale</u> , green and maroon	
7010	7030	80	<u>Dolomite</u> , as above	
		20	<u>Shale</u> , green with minor maroon	
7030	7040	80	<u>Dolomite</u> , white to brown and dark brown, I/IIIIVFA with scattered floating quartz grains	
		20	<u>Shale</u> , green with minor maroon	
7040	7050	100	<u>Dolomite</u> , brown, I/IIIIVF-FA with scattered floating quartz grains and with green shale partings	
7050	7070	100	<u>Dolomite</u> , brown, I/IIIIVF-FA, with green and maroon? shale partings	
7070	7110	100	<u>Dolomite</u> , brown, IVF-MA, with minor amount IIIVFA	
7110	7120	100	<u>Dolomite</u> , brown, I/IIIIVF-FA with fine to medium quartz sandstone parting, tight	
7120	7130	100	<u>Dolomite</u> , brown, I/IIIIVFA with floating quartz grains	
7130	7140	100	<u>Dolomite</u> , brown, I/IIIIVFA with fine quartz sandstone partings, tight	
7140	7145	100	<u>Dolomite</u> , brown, III/IVF-FA with fine quartz sandstone partings, tight	
7145	7155	100	<u>Dolomite</u> , brown, IIIIVF-FA with very fine to fine quartz sandstone partings, tight	
Circ. Sample	7155	65	<u>Dolomite</u> , as above	
		35	<u>Sandstone</u> , white, very fine to fine, quartz, red grains, dolomite cementing, tight	
7155			T.D. (1-12-60)	

## SHELL OIL COMPANY

WEEK ENDING December 19, 1959

CORE FROM 5358 TO 5380

## CORE RECORD

AREA OR FIELD Kane County, Utah

COMPANY Shell Oil

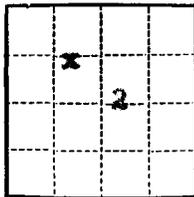
CORES EXAMINED BY A. Oestreich &amp; C. Woodward

LEASE AND WELL NO. Soda Unit #1

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL-GAS
							CORE OR DITCH
1	5358	5380	22'				
	5358	59½	1½'	Limestone, light gray, IVFA, several irregular streaks of maroon shale			None
	59½	62½	3'	Sandstone, silt-very fine, maroon mottled with gray, quartzitic, sub-angular grains, fair sorting, micaceous, hard, tight, calcareous cementing, occasional shale parting, vertical fracture			
	62½	64	1½'	Limestone, light gray, IVFA, with floating rounded fine-medium quartz grains (15%)			
	64	69¾	5-3/4'	Sandstone, light red, very fine-fine, quartzitic, sub-rounded grains, fair sorting, hard, calcareous cement, poor porosity, vertical fracture, massive trace glauconite			
	69¾	70¾	1'	Shale, maroon and interbedded sandstone, as above			
	70-3/4	78½	7-3/4'	Sandstone, as above			
	78½	80	1½'	Siltstone, maroon, calcareous, and sandstone, as above (40%), slump structure			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office \_\_\_\_\_  
U-026502  
Lease No. \_\_\_\_\_  
Soda  
Unit \_\_\_\_\_

*c*  
*W. H. H.*

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	x
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 12, 1960

Soda Unit  
Well No. 1 is located 1980 ft. from  $\begin{matrix} N \\ S \end{matrix}$  line and 1980 ft. from  $\begin{matrix} E \\ W \end{matrix}$  line of sec. 2  
SE 1/4 2 40 S. 7 E. S.L.B.M.  
(Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Wildcat Kane Utah  
(Field) (County or Subdivision) (State or Territory)

The elevation of the  ~~Derrick floor~~ Kelly bushing above sea level is 4767 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Abandonment Works:

- With open end drill pipe plugged as follows:
  - 75 sacks cement 6050-6200
  - 75 sacks cement 4850-5000
  - 140 sacks cement 1535-1610
- Located top plug at 1535'
- Plugged at surface with a 10 sack cement plug, installed marker and abandoned 1-16-60.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company  
Address P. O. Box 156  
Farmington, New Mexico  
By \_\_\_\_\_  
Original signed by B. W. SHEPARD  
E. H. Shepard  
Title Exploitation Engineer



STATE OF UTAH  
 NATURAL RESOURCES  
 Oil, Gas & Mining

Norman H. Bangerter, Governor  
 Dee C. Hansen, Executive Director  
 Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

January 31, 1986

TO: Jean Doutre, Oil and Gas Field Specialist  
 THROUGH: John R. Baza, Petroleum Engineer *JRB*  
 FROM: Dorothy Swindel, Oil and Gas Field Specialist *DS*  
 RE: Kane County Inspections

The information listed below concerns inspections which I conducted in Kane County. The list includes 6 plugged and abandoned wells which require no further inspections. There are no producing or shut-in wells in Kane County. This material was compiled to assist you in your inspections of that area and prevent any repetitious inspections.

HOUSTON OIL AND MINERALS  
 Federal 41-11  
 Sec.11, T.41S, R.7W,

*PA*  
 3/11/77

TIDEWATER OIL COMPANY  
 Utah Federal A-1  
 Sec.34, T.42S, R.2W,

2/10/57.

SUPERIOR OIL COMPANY  
 Kanab Creek 32-16  
 Sec.16, T.42S, R.7W,

12/23/62

G.C. BINGHAM  
 Richter Federal #1  
 Sec.34, T.39S, R.7E,

10/16/69.

SHELL OIL COMPANY  
 Soda Unit #1  
 Sec.2, T.40S, R.7E,

1/16/60

MOUNTAIN FUEL SUPPLY  
 Henrieville #1  
 Sec.31, T.38S, R.2W,

9/30/75

*Plz. note that some of these wells do not require further inspection.*

*- JRB*

43-25-11036

#19

STATE ACTIONS

Mail to:  
RDCC Coordinator  
116 State Capitol  
Salt Lake City, Utah 84114

1. ADMINISTERING STATE AGENCY  
OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

2. STATE APPLICATION IDENTIFIER NUMBER:  
(assigned by State Clearinghouse)

3. APPROXIMATE DATE PROJECT WILL START:  
Upon approval

4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Five County Association of Governments

5. TYPE OF ACTION:  Lease  Permit  License  Land Acquisition  
 Land Sale  Land Exchange  Other \_\_\_\_\_

6. TITLE OF PROPOSED ACTION:  
Application for Permit to Drill

7. DESCRIPTION: *4/1/91 10 yr lease*  
Rangeland Petroleum Corporation proposes to drill the W-T State 2 #1 well (wildcat) on state lease ML-45294, Kane County, Utah. This action is being presented to 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.

8. LAND AFFECTED (site location map required) (indicate county)  
SW/4, NW/4, Section 2, Township 40 South, Range 7 East, Kane County, Utah

9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?

10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:  
Degree of impact is based on the discovery of oil or gas in commercial quantities.

11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:

12. FOR FURTHER INFORMATION, CONTACT: 13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL:  
Frank R. Matthews  
PHONE: 538-5340  
DATE: 10-25-95  
*FR Matthews*  
Petroleum Engineer

SENT BY: LANDS & FORESTRY  
E No. 437 10/25 '95 16:43 ID:RG - CUI:UN

110-26-85 ; 14:21 ;

Lands & Forestry-  
SUB 701 204

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

School & Institutional Trust Lands Administration

IRREVOCABLE DOCUMENTARY LETTER OF CREDIT - FORM 6-C

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

SCHOOL & INSTITUTIONAL TRUST  
LANDS ADMINISTRATION

School & Institutional  
Trust Lands Administration

Gentlemen:

We hereby establish our Irrevocable Documentary Letter of Credit in favor of the Director of the Division of Oil, Gas and Mining of the State of Utah for the account of

MIDLAND, TEXAS 79701-5240  
RANGELAND PETROLEUM CORPORATION, 210 N. MAIN ST. (operator name) for the aggregate amount of

FORTY THOUSAND AND NO/100 dollars @ 40,000.00

available by your drafts at sight on the bank when drawn in accordance with the terms and accompanied by the documents listed under Part C below:

A. This Letter of Credit is issued because the operator is or will be engaged in drilling, re-drilling, deepening, repairing, operating, and plugging and abandonment a well or wells and restoring the well site or sites in the State of Utah for the purposes of oil or gas production and/or the injection and disposal of fluids 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. ML-45294  
Section 2.36 Township T40S Range R7E  
KANE County, Utah

B. This Letter of credit is specifically issued at the request of the operator as guaranty that this fund will be available during the time that the wells referenced above are active. We are not a party to, nor bound by, the terms of any agreement between you and the operator out of which this Letter of Credit may arise.

C. Drafts drawn under this Letter of Credit must be accompanied by an affidavit from the Director of the Division of Oil, Gas and Mining stating that:

- Any well subject to the Letter of Credit is deemed necessary for plugging and abandonment and the operator has not fulfilled such obligation under the Oil and Gas Conservation General Rules of the State of Utah;
  - The draft is in the estimated cost of plugging such well subject to the Letter of Credit up to the aggregate amount of the Letter of Credit.
- We will be entitled to rely upon the statements contained in the affidavit and will have no obligation to independently verify any statements contained therein.

School & Institutional  
Trust Lands  
Admin  
istration

Each draft hereunder must be listed and endorsed on the reverse side of this Letter of Credit, and this Letter of Credit must be attached to the last draft when the credit has been exhausted. Drafts may be presented at the office of this bank no later than 2:00 p.m. (local time) on NOVEMBER 1, 1995 (date), and bear the clause "Drawn under the NORWEST BANK TEXAS, N.A., LUBBOCK, TEXAS (bank name), Bank Letter of Credit No. 81298XZD, dated OCTOBER 25, 1995."

THIS LETTER OF CREDIT SHALL BE DEEMED AUTOMATICALLY EXTENDED FOR A PERIOD OF TWO (two) YEARS FROM THE CURRENT OR ANY FUTURE EXPIRATION DATE HEREOF, UNLESS AT LEAST 90 (NINETY) DAYS PRIOR TO SUCH EXPIRATION DATE, WE NOTIFY YOU THAT WE HAVE ELECTED NOT TO EXTEND THIS LETTER OF CREDIT FOR SUCH ADDITIONAL PERIOD.

We hereby engage with the bona fide holders of this draft and/or documents presented under and in compliance with the terms of this Letter of Credit that such draft and/or documents will be duly honored upon presentation to us. Our obligations hereunder shall not be subject to any claim or defense by reason of the invalidity, illegality, or unenforceability of any of the agreements upon which this Letter of Credit is based.

Bank Name: NORWEST BANK TEXAS, N.A.  
By: MARTHA WILEY  
(Name):  
(Title): ASSISTANT VICE PRESIDENT  
Tel. no. 806-767-7430

(Seal) BY CERTIFIED  
MAIL, RETURN  
RECEIPT  
REQUESTED

Attest:

Assistant Cashier or Cashier

Address of bank:  
P.O. BOX 1241  
LUBBOCK, TEXAS 79401

...to have obligations

FILE No. 754 11/10 '95 18:02 ID:AG - COTTON

806 767 3801



**NORWEST BANK TEXAS, N.A.  
MAIN OFFICE  
1500 BROADWAY  
LUBBOCK, TEXAS 79401**

November 10, 1995

**IRREVOCABLE DOCUMENTARY LETTER OF CREDIT NO. S1298MID**

**State of Utah  
School & Institutional Trust Lands Administration  
3 Traid Center, Suite 400  
355 West North Temple  
Salt Lake City, Utah 84180-1204**

Gentlemen:

We hereby establish our Irrevocable Documentary Letter of Credit in favor of the School & Institutional Trust Lands Administration of the State of Utah for the account of Rangeland Petroleum Corporation 210 N. Main St., Midland, Texas 79701-5249, (company name) for the aggregate amount of FORTY THOUSAND AND NO/100 (40,000.00) available by your draft(s) at sight on the bank when drawn in accordance with the terms and conditions by the documents listed under Part C below:

A. This Letter of Credit is issued because the operator is or will be engaged in drilling, reworking, deepening, repairing, operating, and plugging and abandonment a well or wells and/or the well site or sites in the State of Utah for the purposes of oil or gas production, storage, injection and disposal of fluids in connection therewith for the following described land and well:

**Individual Bond:**

**Lease Name: W-T State "2" #1B  
Well No. ML-45294  
Section 236 Township T40S Range R7E  
Kane County, Utah**

B. This Letter of Credit is specifically issued at the request of the operator as guaranty of the fund will be available during the time that the wells referenced above are active. We are not party to, nor bound by, the terms of any agreement between you and the operator, in which this Letter of Credit may arise.

11-13-95 17:05

RANGELAND EXPLORATION

190 P03

FILE No. 754 11/10 '95 18:03 ID:AG - COTTON

306 767 3801



Page 2

NORWEST BANK TEXAS, N.A.

ATTACHED TO AND FORMS AND INTEGRAL PART OF IRREVOCABLE  
DOCUMENTARY LETTER OF CREDIT NO. S1298MID

- C. Draft(s) drawn under this Letter of Credit must be accompanied by an affidavit from the Director of the School & Institutional Trust Lands Administration stating that:
1. Any well subject to the Letter of Credit is deemed necessary for plugging and abandonment and the operator has not fulfilled such obligation under the Oil and Gas Conservation General Rules of the State of Utah, or
  2. Operator has otherwise defaulted in its lease obligations.
  3. The draft is in the estimated cost of correcting such lease default or plugging of well subject to the Letter of Credit up to the aggregate amount of the Letter of Credit.

We will be entitled to rely upon the statements contained in the affidavit and will have no obligation to independently verify any statements contained herein.

Each draft hereunder must be listed and endorsed on the reverse of this Letter of Credit. This Letter of Credit must be attached to the last draft when the credit has been exhausted. Draft(s) must be presented at the office of this bank no later than 2:00 p.m. (local time) on November 1, 1997 and bear the clause "DRAWN UNDER NORWEST BANK TEXAS, N.A., LUBBOCK, TEXAS, LETTER OF CREDIT NO. S1298MID, DATED NOVEMBER 10, 1995."

THIS LETTER OF CREDIT SHALL BE DEEMED AUTOMATICALLY EXTENDED FOR A PERIOD OF TWO YEARS FROM THE CURRENT OR ANY FUTURE EXPIRATION DATE HEREOF UNLESS AT LEAST 90 (NINETY) DAYS PRIOR TO SUCH EXPIRATION DATE, WE NOTIFY YOU BY CERTIFIED MAIL, RETURN RECEIPT REQUESTED THAT WE HAVE ELECTED NOT TO EXTEND THIS LETTER OF CREDIT FOR AN ADDITIONAL PERIOD.

We hereby engage with you that your draft(s) under and in compliance with the terms of this Letter of Credit will be duly honored if presented to us on or before November 1, 1997, together with the documents specified herein. Our obligations hereunder shall not be subject to any claim or defense by reason of the invalidity, illegality, or unenforceability of any of the agreements upon which this Letter of Credit is based.

Sincerely,

NORWEST BANK TEXAS, N.A.

*Martha Wiley*  
Martha Wiley  
Assistant Vice President  
Letter of Credit Department



**State of Utah  
Division of Oil, Gas & Mining (OGM)**

***ON-SITE PREDRILL EVALUATION AND REVIEW  
FOR  
APPLICATION FOR PERMIT TO DRILL (APD)***

**OPERATOR**  
RANGELAND EXPLORATION

**WELL NO.**  
W - T STATE "2" 1-B

**LEASE NO.**  
ML - 45294

**API No.**  
43-025-11036

**LEASE TYPE**  
State  Fee

**PROPOSED LOCATION**

$\frac{1}{4}/\frac{1}{4}$ SE/NW	<b>SECTION</b> 2	<b>TOWNSHIP</b> 40S	<b>RANGE</b> 7E
<b>COUNTY</b> KANE		<b>FIELD</b> WILDCAT	
<b>SURFACE</b> 1988 FNL-1983 FWL			
<b>BOTTOM HOLE</b> SAME AS ABOVE			
<b>GPS COORDINATES</b> 489551 E 4135072 N			

**SURFACE OWNER**  
STATE OF UTAH

**SURFACE AGREEMENT** Yes  No  **CONFIDENTIAL** Yes  No

**LOCATING AND SITING**

<input type="checkbox"/>	UAC R649-2-3.	Unit	<input type="text"/>
<input checked="" type="checkbox"/>	UAC R649-3-2.	General	
<input type="checkbox"/>	UAC R649-3-3.	Exception	
<input type="checkbox"/>	UCA 40-6-6.	Drilling Unit	-- Cause No. <input type="text"/>

## DRILLING PROGRAM

The following information is included in the Application for Permit to Drill submitted.

- 1 Surface Formation and Estimated Tops/Geologic Markers
- 2 Estimated Depths and Names of Anticipated Water, Oil, Gas or other Mineral Bearing Formations  
  
(All fresh water sands encountered during drilling shall be recorded and reported to the Division on Form 7.)
- 3 Well Control Equipment & Testing Procedures
- 4 Proposed Casing and Cementing Program
- 5 Mud Program, Circulating Medium, and Monitoring equipment
- 6 Coring, Testing, and Logging Program
- 7 Expected Bottom Hole Pressures and any anticipated Abnormal Pressures, Temperatures or Potential Hazards such as hydrogen sulfide, expectations and contingency plans for mitigating identified hazards
- 8 Any other information relative to the proposed operation.

**Onsite Participants:**

Jim Thompson DOGM, Mike Hebertson DOGM, Brian Wood representing Rangeland.

**Regional Setting/Topography:**

This well is located in the Kaiparowits Basin of Southern Utah Northeast of Lake Powell. The area is dominated by sandstone cliffs of the Entrada Sandstone and broad flat mesas with erosional remnant sandstone features.

**SURFACE USE PLAN:**

Current Surface Use: Grazing for livestock, Minor wildlife habitat.

Proposed Surface Disturbance: The plan is to orient the rig on the old location built by Shell in the late 1950's. Little or no new disturbance is required.

1. Existing Roads Hole in The Rock Trail from Escalante Utah.
2. Planned Access Roads - include length of new road, length of existing road to be upgraded, maximum disturbed and travel surface widths, maximum grades, turnouts, surface materials, drainage, cattleguards An access road is already in place and will be upgraded to allow the heavy equipment turn off the main road. No new road will be needed.
3. Location of existing wells within one-mile radius of proposed location, include water, injection, producing, drilling with present status of each well There are none, all other wells have been previously plugged.
4. Location of Production Facilities and Pipelines Production facilities will be placed on location and no pipeline will be necessary.
5. Location and Type of Water Supply (include Division of Water Rights approval or identifying number) Water will be purchased from the City of Escalante, Utah.
6. Source of Construction Material Material will be borrowed from the leveling of the location during construction.
7. Waste Management Plan See part 7 of the Surface Use Plan submitted as part of the APD.
8. Ancillary Facilities None will be required.

9. Well Site Layout. The reserve pit will be located in the Nw corner of the well pad and the drilling rig situated accordingly.
10. Surface Restoration Plans. The surface will be restored as close as possible to match the terrain and reseeded with a mixture recommended by State Lands.

**ENVIRONMENTAL PARAMETERS:**

**Affected Floodplain and/or Wetlands:**

A 404 dredge and fill permit may be required if this site is in or adjacent to a wetland or other established drainage or floodplain. (Contact the Army Corps of Engineers if there are concerns of this nature) None. Only minor drainage channels exist in the immediate area.

**Flora/Fauna:**

Briefly describe the flora found on the proposed site and the fauna evidenced or sighted on or near the proposed location Possible raptor habitat, some mice and other sonoran rodents. The area is dominated by black brush, rabbit brush, and cheat grass. Some prickley pear.

**SURFACE GEOLOGY**

Soil Type and Characteristics: Soil is sandy and very porous little to no clay. Some gravel had been hauled to the location in the past.

Surface Formation & Characteristics: Entrada Sandstone, Medium to light tan with shades of white and red. Very porous and loosely cemented. Weathers to fine blow sand.

Erosion/Sedimentation/Stability: No erosion, sedimentation or stability problems were noted.

Paleontological Potential Observed: None.

**RESERVE PIT**

Characteristics: the pit will be 140' X 75' X 8' and will located on the NW area of the well pad.

Lining (Site ranking form attached): The pit will require a liner.

**OTHER OBSERVATIONS**

Cultural Resources/Archaeology (if proposed location is on State land, has an archaeology clearance been obtained?): None were observed. However the area has some historical value as a pioneer trail from the late 1800's. The site was previously disturbed. A cultural resource clearance has been requested.

Comments: A waiver to the H2S contingency plan has been requested.

K. Michael Hebertson & Jimmie Thompson  
OGM Representative

November, 15 1995  
Date and Time



**COMPLETE ARCHAEOLOGICAL SERVICE ASSOCIATES**

12400 Highway 666 • Cortez, Colorado 81321 • (303) 565-9229

Kenneth L. Wintch, Archaeologist  
Division of State Lands and Forestry  
355 West North Temple  
3 Triad Center, Suite 400  
Salt Lake City, Utah 84180-1204

November 15, 1995

RE: U-95-CH-0665s

Dear Mr. Wintch,

Enclosed are two copies of a cultural resource clearance report prepared for Rangeland Petroleum Corporation on the proposed well location on State land, approximately 40 miles south of Escalante, Utah. This is the second location surveyed for Rangeland in Section 2 and is staked on an existing well pad approximately 1300 feet south of previously inventoried W-T "2".No. 1. The original inventory report for this well was submitted to your office on November 1, 1995.

One unworked flake of white chalcedony was noted within the survey area. No significant cultural resources were located and cultural resource clearance is recommended. The records search through the Division of State History confirmed that there are no known paleontological localities in the vicinity of the project area.

Please do not hesitate to call me if you have any questions concerning this project.

Sincerely,

Laurens C. Hammack  
CASA

Enclosures: 2 copies report  
1 copy Utah cover sheet

cc: Terry Michael, Rangeland Petroleum Corporation  
Brian Wood, Permits West

### **ABSTRACT**

A cultural resource inventory was undertaken on the revised location for a single oil well for Rangeland Petroleum Corporation approximately 40 miles southeast of Escalante in Kane County, Utah. The inventory was done on November 11, 1995 by Laurens C. Hammack, Complete Archaeological Service Associates (CASA) at the request of Brian Wood, Permits West, agent for Rangeland Petroleum Corporation. The project area is on State of Utah lands and the field work was done under State of Utah Project No. U-95-CH-0596s, issued to CASA. This is the second location surveyed for this well (Hammack, N. 1995).

A 500-ft by 500-ft area (5.75 acres) was inventoried for the 310-ft by 255-ft (1.81 acre) well pad. Access is directly off the existing county road. The proposed well will completely utilize a capped/abandoned Shell Oil well pad. No significant cultural resource were located within the survey areas and cultural resource clearance is recommended for the revised location for Rangeland Petroleum Corporation's W-T "2" No. 1 well pad described in this report.

## INTRODUCTION

A Class III cultural resource inventory was carried out for the revised location for a single oil well on State of Utah lands approximately 40 miles southeast of Escalante, Kane County, Utah (Figure 1). The inventory was undertaken for Rangeland Petroleum Corporation of Midland, Texas at the request of their agent, Brian Wood, Permits West. The inventory was done on November 11, 1995 by Laurens C. Hammack, Complete Archaeological Service Associates (CASA) under the authority of Utah State Project Permit No. U-95-CH-665s issued to CASA.

## PROJECT LOCATION AND DESCRIPTION

The project area is located in the SE 1/4, NW 1/4, Section 2, T40S, R7E, SLPM, Kane County, south central Utah (Figure 2). The well is accessed by the Hole in the Rock Road, off of Utah Highway 12. The location is situated on the northern edge of Forty Mile Ridge, which extends east from Fifty Mile Bench at the base of the Straight Cliffs along the eastern edge of Fifty Mile Mountain. The nearest drainage is Hurricane Wash to the north. The terrain is rolling low dunes stabilized by mormon tea and blackbrush. A complete description of the project including details on cadastral location, staked footages, setting, cultural resources, and recommendations is presented following the body of the report. The map reference for this project is the Sooner Bench, Utah 7.5 minute USGS quadrangle dated 1968, photo-revised 1976.

## SURVEY METHODOLOGY AND PREVIOUS RESEARCH

Prior to beginning the field investigations, a record search was undertaken through the Division of State History in Salt Lake City. This record search revealed that no previous surveys or sites had been recorded within the vicinity of the project area. The paleontological files and maps indicated that no localities are known in the project area.

Background data on the prehistory of the region is available from several reports dealing with the general area. In 1979 the Bureau of Land Management produced an overview and evaluation of the cultural resources within a three million acre area of federal lands in south central Utah (Hauck 1979). The project area is included within the BLM's Escalante River Planning Unit where 199 sites were recorded within 72 quarter-section sample areas. The majority of the sites recorded are lithic scatters of unknown cultural and temporal affiliation. The largest project in the region was undertaken as a result of the construction of the Glen Canyon Dam (Jennings 1966). Numerous sites were excavated with a majority of the work done on Anasazi sites. At Boulder, Utah, 40 miles to the north of the project area, the State of Utah maintains a well preserved Kayenta Anasazi site as a State Park. The Coombs Site, excavated in the late 1950s by the University of Utah (Lister and Lister 1959) contains several roomblocks, pithouses, and kivas. A brand new museum has just been completed.

The revised well pad had been staked prior to the inventory by Huddleston Land Surveying. The pad and pit areas were marked with flagged lathe and easily identified. Two pad layouts utilizing the existing pad were inventoried. A 500-ft by 500-ft (5.75 acre) area was surveyed for the 310-ft by 255-ft (1.81 acre) well pad. The survey was done by one archaeologist walking a series of parallel transects spaced no greater than 15 meters apart. Only those materials dating prior to 1945 were recorded.

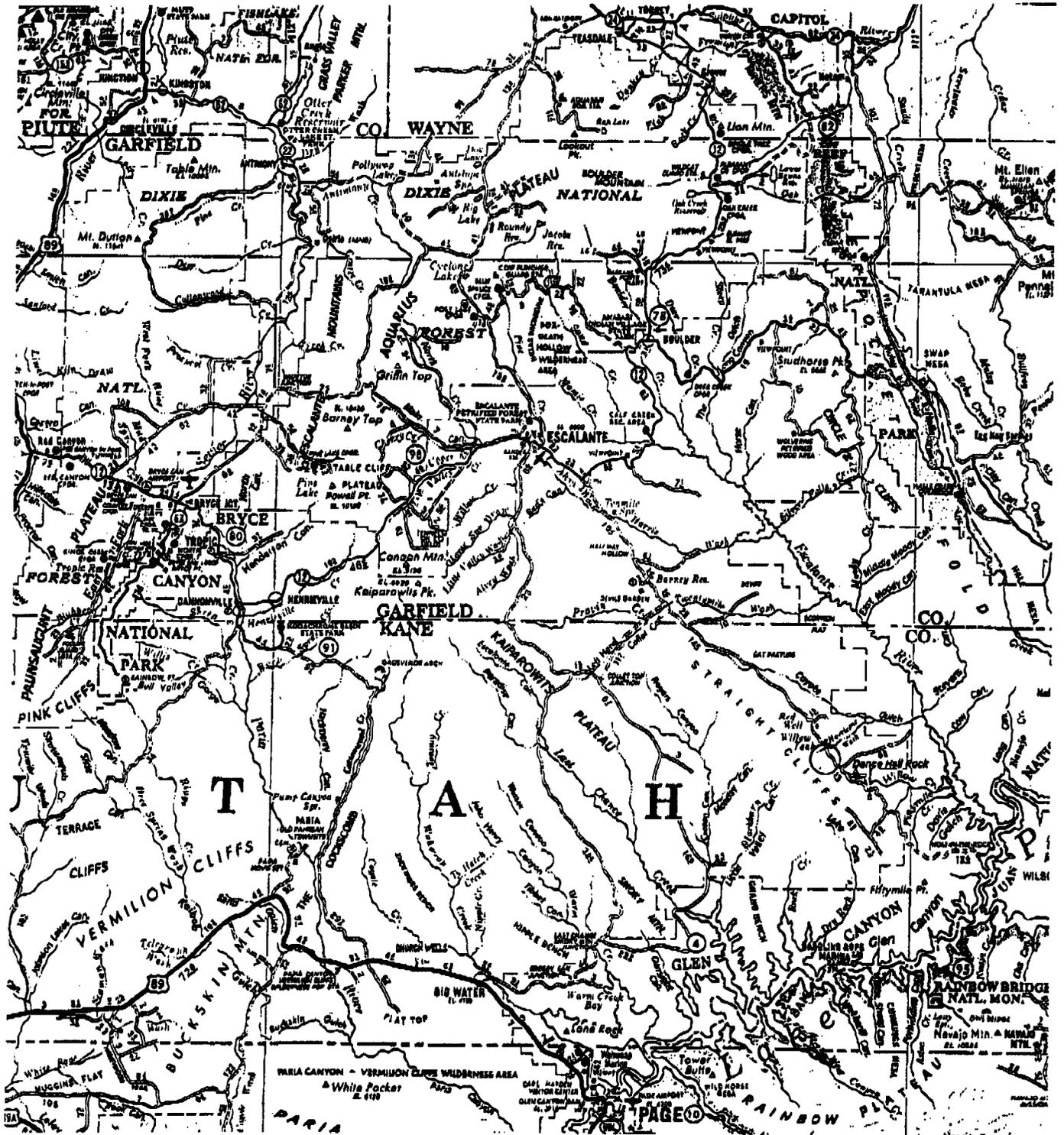


Figure 1. Project location map, south central Utah.

## INVENTORY RESULTS AND RECOMMENDATION

No significant cultural resources were located within the surveyed project area. One unworked white chalcedony secondary flake was located on a small dune on the northern edge of the survey area just outside of the existing pad. Cultural resource clearance is recommended for the revised location of Rangeland Petroleum Corporation's W-T "2" No. 1 well pad at the location described in this report.

## REFERENCES

Hammack, Nancy S.

- 1995 Cultural Resource Inventory, Rangeland Petroleum Corporation's W-T "2" Well Pad, Kane County, Utah. *Complete Archaeological Service Associates, CASA 95-61, Cortez.*

Hauck, F.R.,

- 1979 Cultural Resource Evaluation in South Central Utah 1977-1978. *Bureau of Land Management Utah Cultural Resource Series No. 4, Salt Lake City.*

Jennings, Jesse D.

- 1966 Glen Canyon: A Summary. *University of Utah Anthropological Papers No. 81, Salt Lake City.*

Lister, Robert H. And Florence C. Lister

- 1959 The Coombs Site. *University of Utah Anthropological Papers No. 41, Salt Lake City.*

## WELL DESCRIPTION

**Well Name:** W-T "2" No. 1

**Location:** Original Location: Center, SW 1/4, NW 1/4, Section 2, T40S, R7E,  
Revised Location: Center, SE 1/4, NW 1/4, Section 2, T40S, R7E  
SLPM, Kane County, Utah (Figure 2)

**USGS Map:** Sooner Bench, Utah, 7.5 min., 1968, photo-inspected 1976

**Operator:** Rangeland Petroleum Corporation

**Staked Footages:** Original Location: 1980' FNL, 660' FWL  
Revised Location: 1988' FNL, 1983' FWL

**Ownership:** State of Utah

**Elevation:** 4775 feet

**Area Surveyed:** 500-ft by 500-ft (5.75 acres) surveyed for a well pad with dimensions of 310-ft by 255-ft (Figure 3). Access is directly off the existing county road.

**Description:** Staked location occupies most of the existing capped and abandoned Shell Oil Company well pad approximately 1300-ft east of W-T "2", No. 1 well inventoried on October 25, 1995 (Hammack, N. 1995). The well is located on the east side of Hole in the Rock Road and is completely leveled and bladed (Figure 4). The original terrain was low dunes stabilized by mormon tea and blackbrush with snakeweed, prickly pear cactus, and narrowleaf yucca also found. Bladed pad area covered with caliche and chalcedony gravels with a vegetation cover of snakeweed and grasses with a few blackbrush reestablished on northern end of pad. Small drainage borders northern edge of survey parcel with a few small junipers growing along this arroyo. Several old oil cans, oil filters, fragments of sheet metal, and a few pieces of lumber remain from original well drilling operations which date to the 1950's.

**Cultural Resources:** One white chalcedony unutilized secondary flakes.

**Recommendations:** Cultural resource clearance is recommended for the revised location for W-T "2" No. 1 well at the location described above.

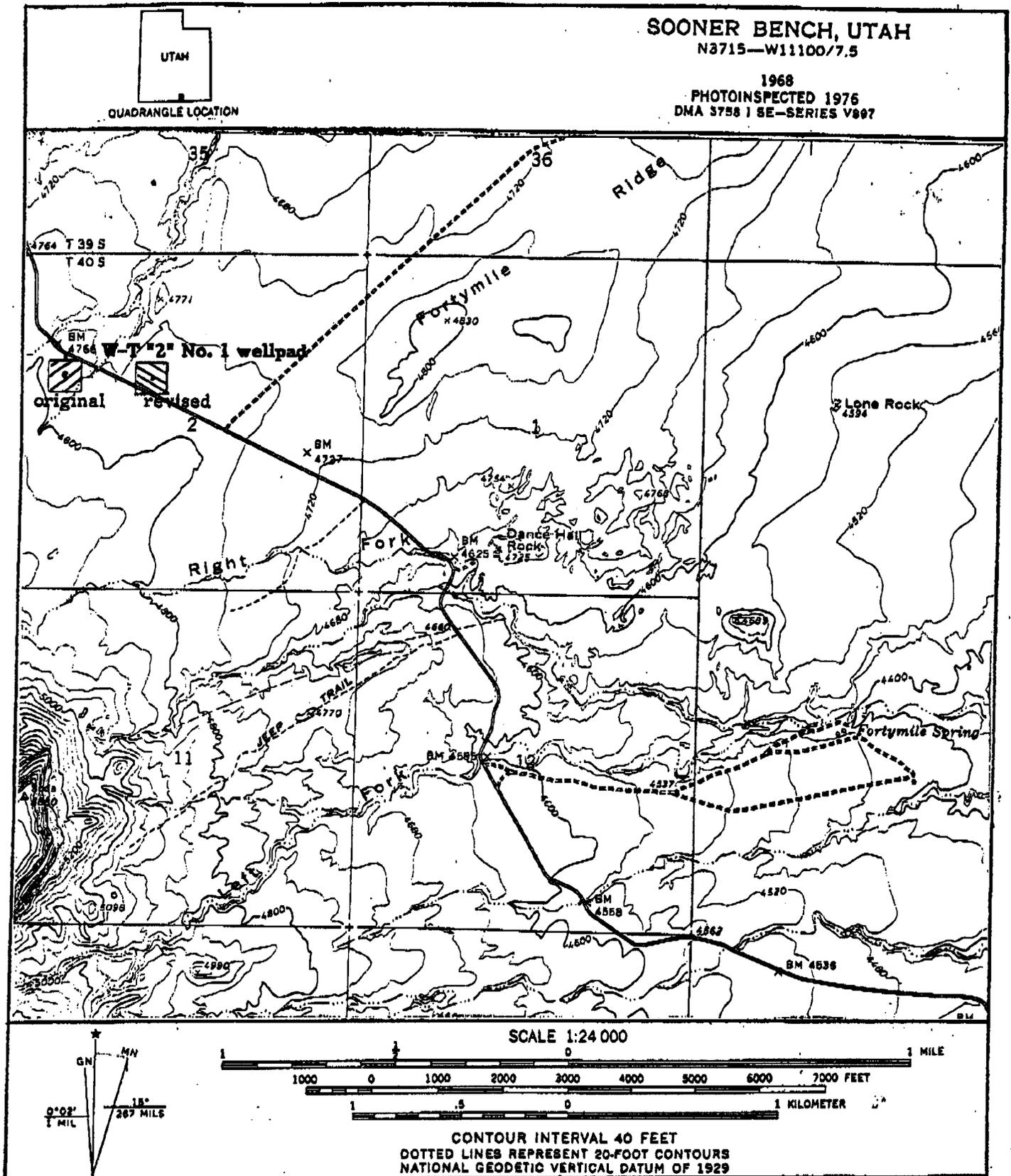


Figure 3. Location map, Rangeland's W-T "2" No. 1 wellpad and access road.

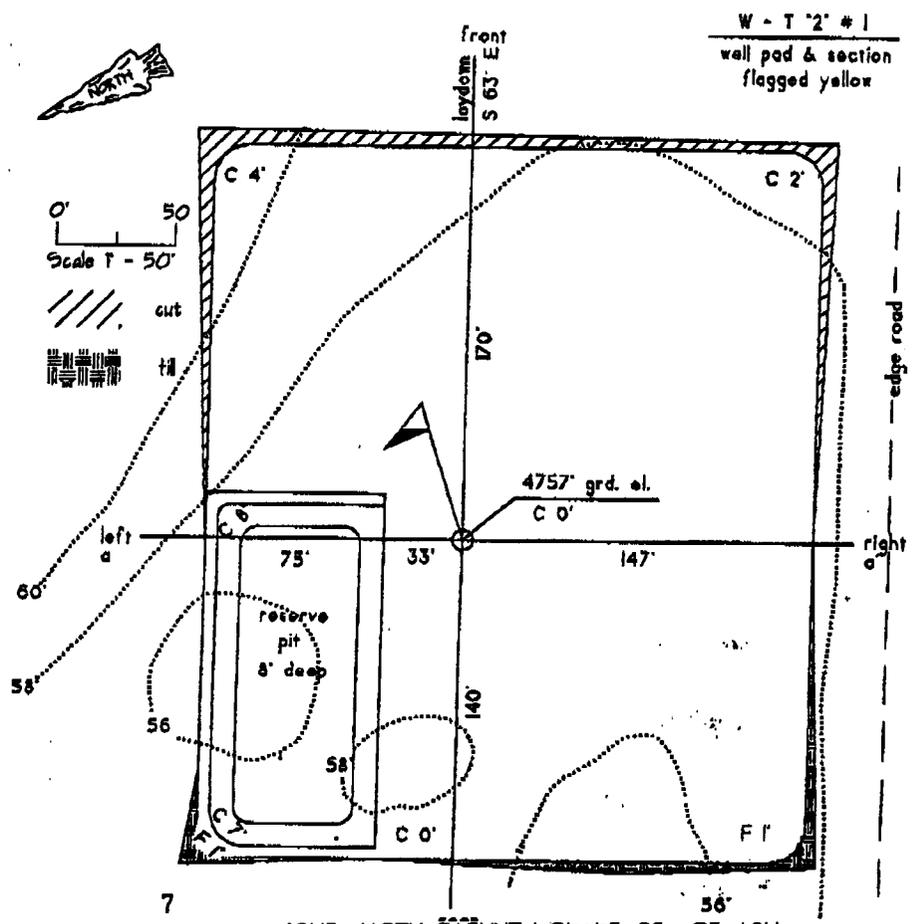
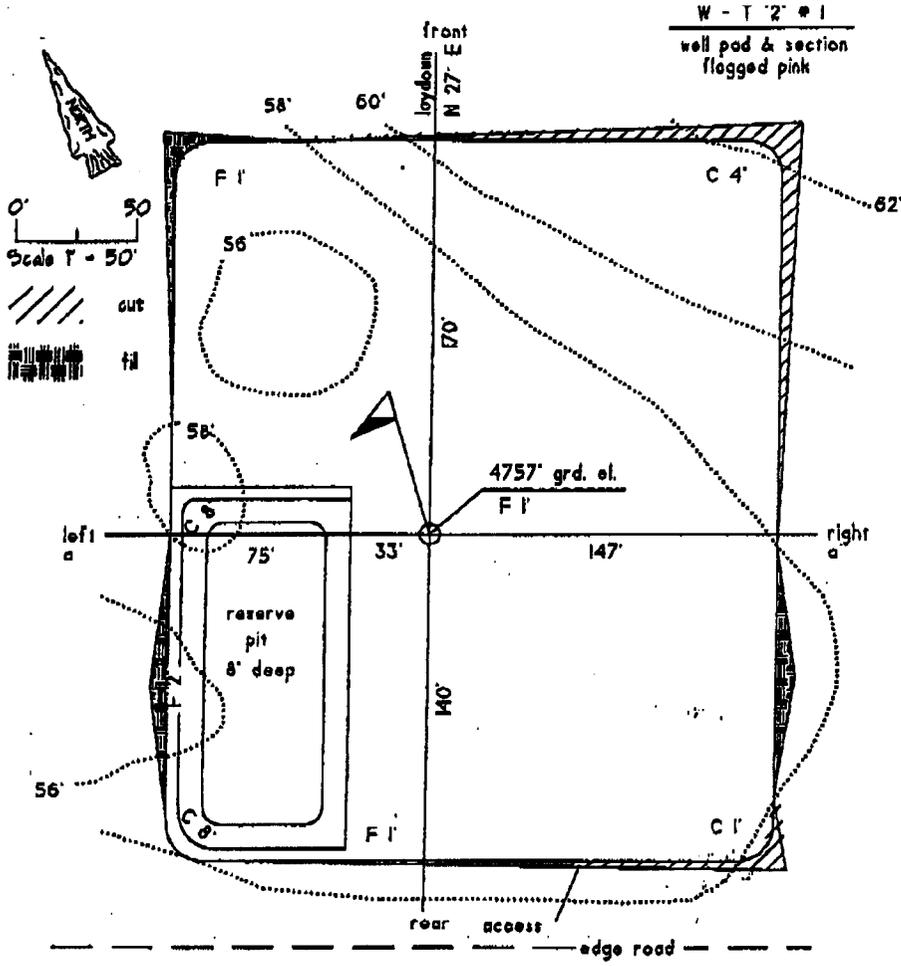


Figure 3. Alternate well pad construction plats prepared by Huddleston Land Surveys (reduced).



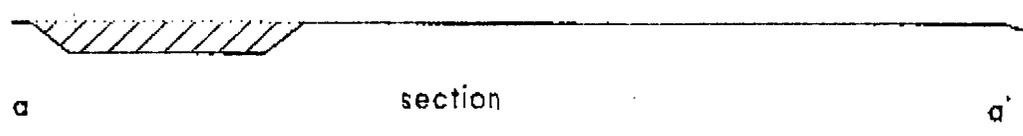
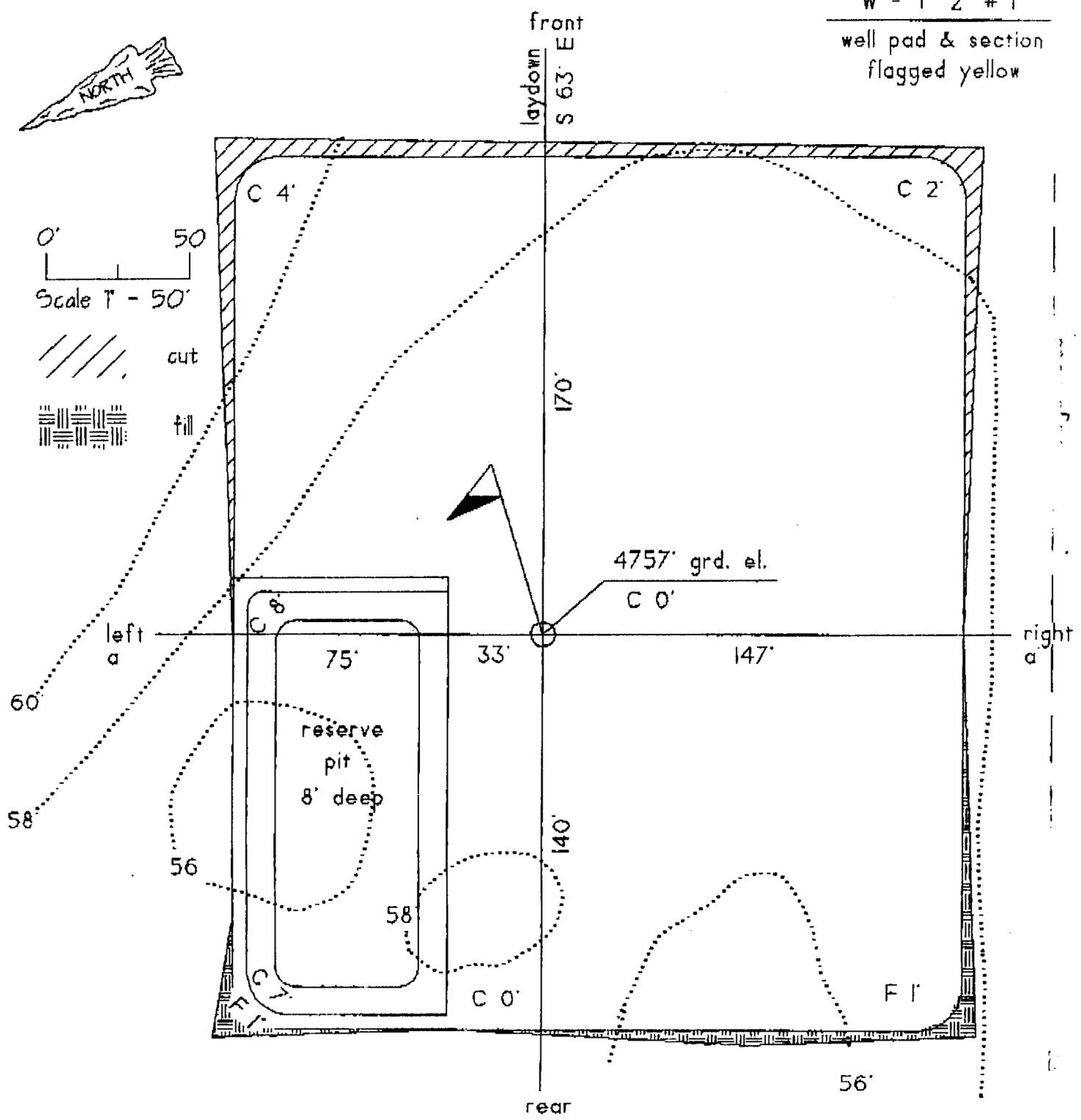
**Figure 4.** Overall view of proposed location for revised W-T"2", No. 1 well pad on old Shell Oil Company well pad. View is to the northwest with existing access road (Hole in the Rock Road) to left. Old capped drill hole indicated by arrow.

W - T '2' # 1  
well pad & section  
flagged yellow

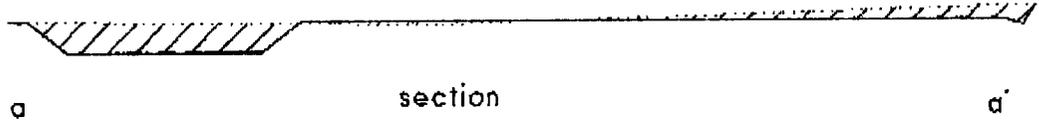
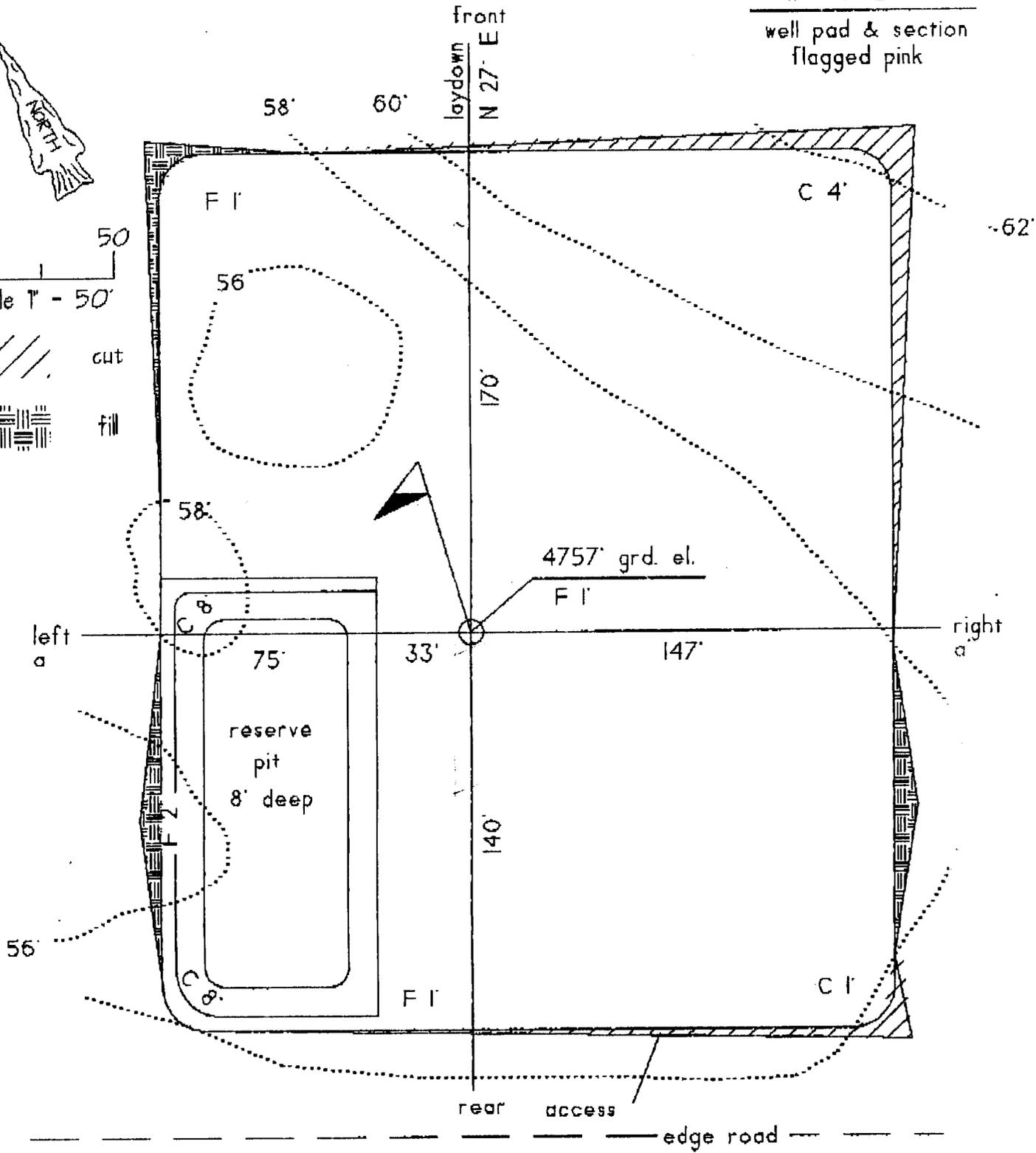
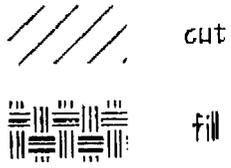
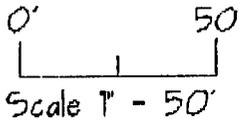


0' 50'  
Scale 1" = 50'

cut  
fill



W - T 2 # 1  
well pad & section  
flagged pink





# Southern Utah Wilderness Alliance

1471 South 1100 East  
Salt Lake City, UT 84105

November 16, 1995

Mr. A.J. Martinez  
Escalante Resource Area  
Bureau of Land Management  
Escalante, UT 84726

Dear A.J.:

I am enclosing a copy of a permit application for a wildcat oil well on trust lands in the Escalante Resource Area. The Southern Utah Wilderness Alliance is deeply concerned about this proposal because of its potential impacts on the scenic and wilderness values of the Escalante canyon country and the historic values of the nearby Dance Hall Rock.

We want to ensure that there will be no upgrades of the Hole in the Rock Road to facilitate movement of the drill rig to this sensitive area. We request that your office closely coordinate with Trust Lands Administration and the Utah Division of Oil, Gas and Mining to ensure that public land values are not harmed by this proposed development. I have enclosed a copy of a correspondence with the Utah Division of Oil, Gas and Mining which outlines some of our concerns.

Thank you for your cooperation.

Sincerely,

Ken Rait  
Issues Director

cc: Bill Lamb, BLM Utah State Office  
Mat Millenbach, U.S. Department of the Interior



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Ken Rait  
Issues Director

cc: Bill Lamb, BLM Utah State Office  
Mat Millenbach, U.S. Department of the Interior

STATE ACTIONS

Mail to:  
RDCC Coordinator  
116 State Capitol  
Salt Lake City, Utah 84114

1. ADMINISTERING STATE AGENCY  
OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

2. STATE APPLICATION IDENTIFIER NUMBER:  
(assigned by State Clearinghouse)

3. APPROXIMATE DATE PROJECT WILL START:  
December 1, 1995

4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Five County Association of Governments

5. TYPE OF ACTION:  Lease  Permit  License  Land Acquisition  
 Land Sale  Land Exchange  Other \_\_\_\_\_

6. TITLE OF PROPOSED ACTION:  
Application for Permit to Drill

7. DESCRIPTION:  
Rangeland Petroleum Corporation proposes to drill the W-T State 2 #1-B well (wildcat) on state lease ML-45294, Kane County, Utah. This action is being presented to 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.

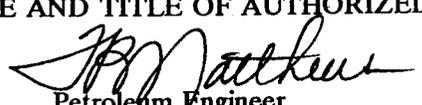
8. LAND AFFECTED (site location map required) (indicate county)  
SE/4, NW/4, Section 2, Township 40 South, Range 7 East, Kane County, Utah

9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?

10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:  
Degree of impact is based on the discovery of oil or gas in commercial quantities.

11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:

12. FOR FURTHER INFORMATION, CONTACT: 13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL:  
Frank R. Matthews  
PHONE: 538-5340

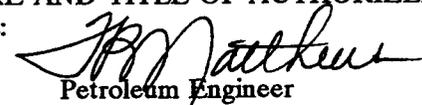
  
Petroleum Engineer

DATE: 11-17-95

# 11

STATE ACTIONS

Mail to:  
RDCC Coordinator  
116 State Capitol  
Salt Lake City, Utah 84114

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OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203
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Frank R. Matthews  
PHONE: 538-5340  
DATE: 11-17-95  
  
Petroleum Engineer

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

Type of Work: DRILL  DEEPEN

Type of Well: OIL  GAS  OTHER: SINGLE ZONE  MULTIPLE ZONE

Name of Operator: **RANGELAND PETROLEUM CORPORATION**

Address and Telephone Number: **210 NORTH MAIN ST., MIDLAND, TX. 79701 (915) 686-8983**

Location of Well (Footings): **1988' FNL & 1983' FWL**  
At Surface:  
At Proposed Producing Zone: **SAME**

1. Distance in miles and direction from nearest town or post office: **42 MILES SE OF ESCALANTE**

2. Lease Designation and Serial Number: **ML-45294**

3. If Indian, Allottee or Tribe Name: **N/A**

4. Unit Agreement Name: **N/A**

5. Farm or Lease Name: **W-T STATE "2"**

6. Well Number: **# 1 - B**

7. Field and Pool, or Wildcat: **WILDCAT**

8. County: **KANE** 9. State: **UTAH**

10. Distance to nearest property or lease line (feet): **1983'**

11. Number of acres in lease: **1280**

12. Number of acres assigned to this well: **40**

13. Distance to nearest well, drilling, completed, or applied for, on this lease (feet): **N/A**

14. Proposed Depth: **10,500'**

15. Rotary or cable tools: **ROTARY**

16. Elevation (show whether DP, RT, GR, etc.): **4,757' UNGRADED**

17. Approximate date work will start: **DEC. 1, 1995**

**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9"	7-5/8" WC-70	29.7#	400'	675 SX & TO SURFACE
9"	7-5/8" WC-70	26.4#	4,800'	"
9"	7-5/8" WC-50	26.4#	5,400'	"
9"	7-5/8" WC-50	29.7#	7,200'	"
6-1/2"	4-1/2" J-55/M-80	11.6#	10,500'	400 SX & TO 7,000'

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

This wellbore was originally drilled by Shell as the Soda Unit #1 in 1959 and subsequently plugged and abandoned.

Rangeland is cancelling its W-T State "2" #1 (1980' FN & 660' FE 2-40s-7e) APD dated 10-17-95. This APD will replace that APD.

Rangeland Petroleum Corporation is now lessee of record. Designation of Operator from Ben Donegan dated 10-23-95 is now canceled.

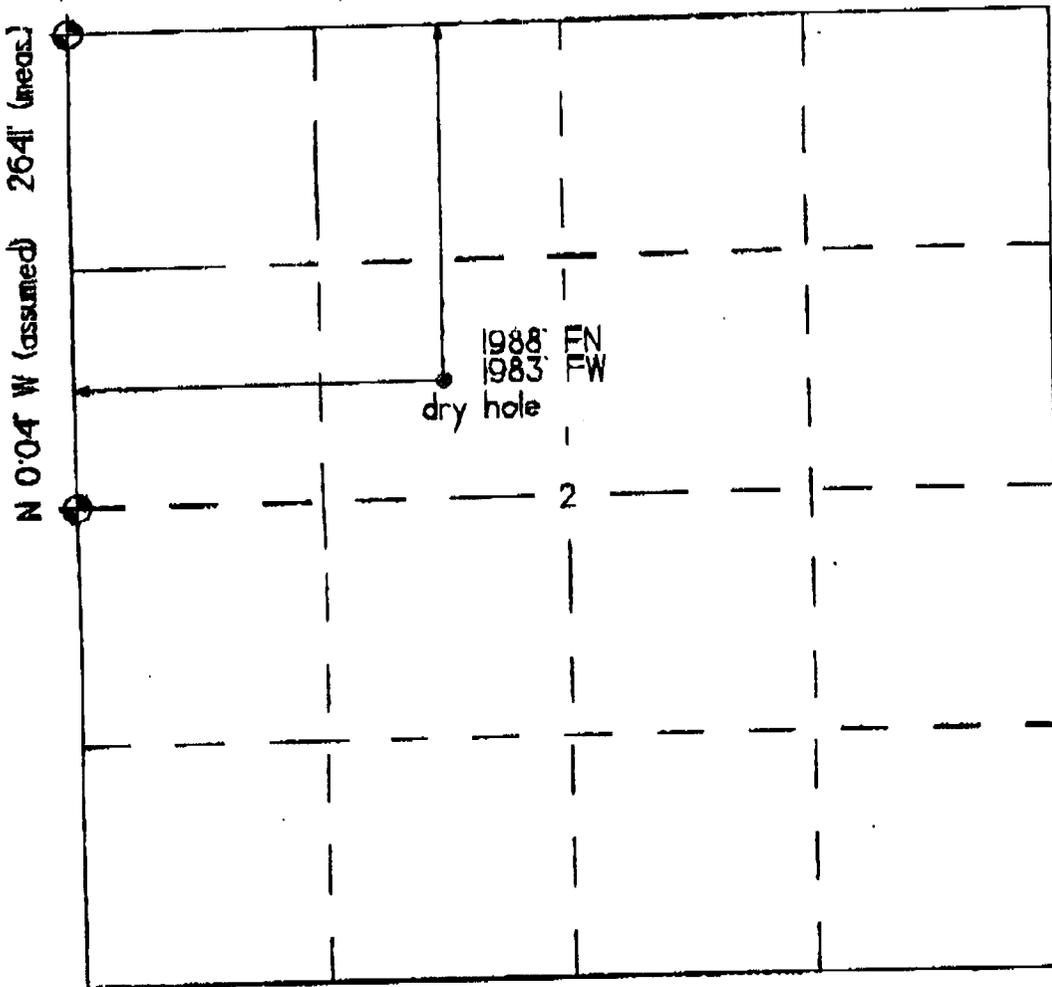
Name & Signature: *Ryan [Signature]* (505) 466-8120 Title: CONSULTANT Date: 11-17-95

No space for State use only)

API Number Assigned: \_\_\_\_\_

Approval: \_\_\_\_\_

Well Location Plat



Well Location Description

RANGELAND EXPLORATION COMPANY  
W - T 2' # 1  
1988' FNL & 1983' FWL  
Section 2, T.40 S., R.7 E., SLM  
4757' grd. el.  
Kane County, UT



11 November 1995

*Gerald G. Huddleston*

Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.

HUDDLESTON LAND SURVEYING - BOX KK - CORTEZ, CO - (970) 565 -3330

Rangeland Petroleum Corporation  
 W-T State "2" #1-B  
 1988' FNL & 1983' FWL  
 Sec. 2, T. 40 S., R. 7 E.  
 Kane County, Utah

PAGE 1

CONFIDENTIAL

Drilling Program

<u>1. Formation Name</u>	<u>Depth from GL</u>	<u>Depth from KB</u>	<u>Subsea Depth</u>
Entrada Ss	0'	12'	+4,757'
Navajo Ss	264'	276'	+4,493'
Kayenta Ss	1,497'	1,509'	+3,260'
Wingate Ss	1,750'	1,762'	+3,007'
Chinle Shale	2,058'	2,070'	+2,699'
Moenkopi	2,801'	2,813'	+1,956'
Kaibab Ls	3,028'	3,040'	+1,729'
Coconino Ss	3,073'	3,085'	+1,684'
Organ Rock	3,404'	3,416'	+1,353'
Cedar Mesa Ss	3,935'	3,947'	+ 822'
Upper Hermosa	5,328'	5,340'	- 571'
Molas	5,911'	5,923'	-1,154'
Redwall Ls	6,108'	6,120'	-1,351'
Ouray Ls	6,703'	6,715'	-1,946'
Elbert Ls	6,931'	6,943'	-2,174'
Lynch (Muav) Ls	7,118'	7,130'	-2,361'
Bright Angel	8,278'	8,290'	-3,521'
Tapeats Ss	8,578'	8,590'	-3,821'
Precambrian Shale	8,828'	8,840'	-4,071'
Total Depth (TD)	10,500'	10,512'	-5,743'

\* All depths are based on an ungraded ground level of 4,757'.

2. NOTABLE ZONES

Tapeats sandstone is the target zone. Uranium can be found in the Chinle. No other mineral zones are expected. Water zones include the Entrada-Wingate interval and Redwall.

Rangeland Petroleum Corporation  
 W-T State "2" #1-B  
 1988' FNL & 1983' FWL  
 Sec. 2, T. 40 S., R. 7 E.  
 Kane County, Utah

CONFIDENTIAL

3. PRESSURE CONTROL (Also see "5." on PAGE 4)

A backhoe will dig out cellar. A 10-3/4" casing stub and 3000# 10-3/4" x 11" wellhead with base plate will be welded onto the surface casing. Cellar will be cemented with Redimix. WOC for 48 hours. NU wellhead, annular preventer, and rotating head. Flange up gas buster.

A 13-5/8" x 2000 psi annular preventer will be used from surface casing to ~7,200'. An 11" x 3,000 psi double ram BOP with 3,000 psi choke manifold will be used from ~7,200' (intermediate casing point) to TD. (Typical BOPs are on the next page. Actual models will not be known until the bid is let.) Pressure test casing and annular preventer to 1,000 psi before drilling out of surface casing. Test valves, manifold, lines, pipe, and blank to 3,000 psi before drilling out intermediate casing. Place test plug in bottom of wellhead and retest surface equipment every 30 days.

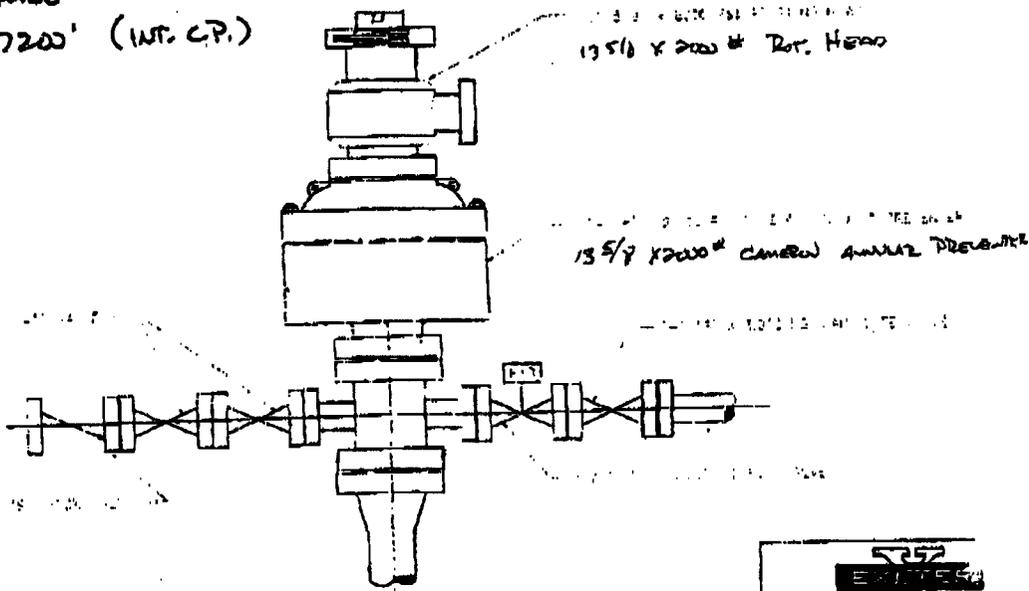
BOP system will be consistent with API RP53. BOP controls will be installed before drilling the intermediate casing plug, and will stay in use until the well is completed or abandoned. BOPs will be inspected and operated at least daily to assure good mechanical working order. All BOP mechanical tests, pressure tests, and inspections will be recorded on the drillers log or daily drilling report.

4. CASING & CEMENTING

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>Setting Depth</u>
9"	7-5/8"	29.7#	WC-70	LT&C	New	400'
9"	7-5/8"	26.4#	WC-70	LT&C	New	4,800'
9"	7-5/8"	26.4#	WC-50	ST&C	New	5,400'
9"	7-5/8"	29.7#	WC-50	LT&C	New	7,200'
6-1/2"	4-1/2"	11.6#	J-55/N-80	LT&C	New	10,500'

Liner hanger set at 7,000'. Tubing head will be 11" 2M x-1/16" 2M LPO.

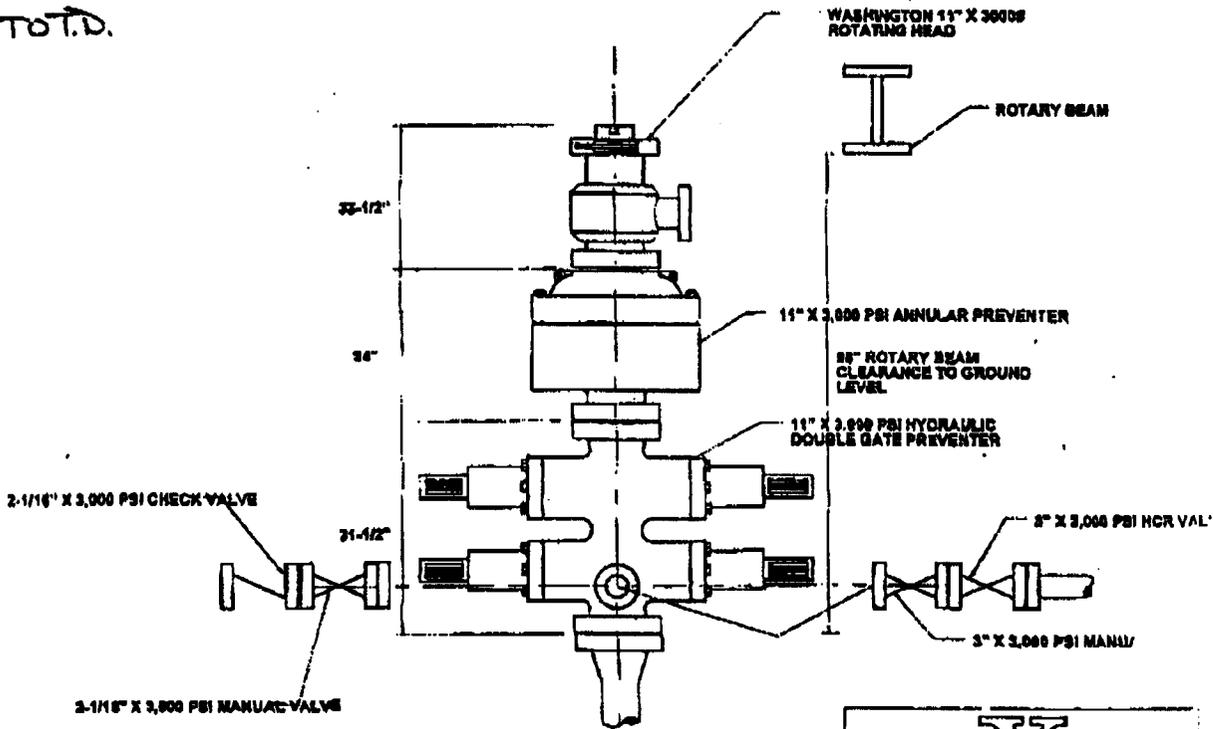
FROM SURFACE  
CSG TO 7200' (INT. C.P.)



**257**  
**EXPLORER**  
**225**  
**INTERNATIONAL**

DATE	REV.	BY
11/26/95	1	CH

FROM 7200' (INT. CSG. PL)  
TOT.D.



**257**  
**EXPLORER**  
**225**

DATE	REV.	BY
11/26/95	1	CH

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

PAGE 4

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Intermediate casing will be cemented to surface in two stages with stage tool set at  $\approx 2200'$ , float shoe, and float collar. Centralizers will be set  $\approx 7180'$ ,  $\approx 7120'$ ,  $\approx 2220'$ ,  $\approx 2180'$ , and  $\approx 300'$ . Stage 1 lead will be  $\approx 350$  sx (100% excess) standard cement with 3% econolite + 0.25 #/sk Flocele + 0.6% Halad 9 (11.4 ppg, 2.85 cu ft/sk). Stage 1 tail will be  $\approx 100$  sx standard cement + 2%  $\text{CaCl}_2$  (15.6 ppg, 1.19 cu ft/sk). Stage 2 lead will be  $\approx 125$  sx (125% excess) standard cement with 3% econolite + 0.25 #/sk Flocele + 0.6% Halad 9 (11.4 ppg, 2.85 cu ft/sk). Stage 2 tail will be  $\approx 100$  sx standard cement + 2%  $\text{CaCl}_2$  (15.6 ppg, 1.19 cu ft/sk). If a 9-7/8" bit is used instead of a 9" bit, then cement volumes will be increased accordingly (volume of a 9-7/8" hole is 72% larger than a 9" hole with the given casing).

Production casing will be cemented to 7,000' with a lead of  $\approx 400$  sx 50:50 Poz with 1/4#/sk Flocele + 0.6% Halad 9 (14.2 ppg, 1.25 cu ft/sk). Actual volumes will be determined by caliper log.

## 5. MUD PROGRAM

Well will be drilled with air, air mist, and aerated water depending upon hole conditions. Weighted mud and lost circulation material will be on site. A mud logger will be on site once the well is below 7,200' to collect two sets of samples at 10' intervals.

Rig up air package with 2 compressors and mist pump. Drill out surface casing with  $\approx 1750$  scfm air, ream and drill to  $\approx 7200'$ . If tight spots are found and persist, ream with 9-7/8" bit to TD. Mist as necessary to keep hole clean. Change to aerated water if significant water flow is encountered. Intermediate mud will be 5.5 to 6.5 ppg, 28 to 32 viscosity, N/C filtrate, and a pH of 9 to 10.

Production casing will be air drilled with 1400 scf/min, thirty 4-3/4" drill collars, rotating head, gas buster, and air mist as needed.

**PERMITS WEST**, INC.  
PROVIDING PERMITS for LAND USERS

Rangeland Petroleum Corporation  
 W-T State "2" #1-B  
 1988' FNL & 1983' FWL  
 Sec. 2, T. 40 S., R. 7 E.  
 Kane County, Utah

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## 6. CORING, TESTING, & LOGGING

No cores are planned. A DST may be run in the Tapeats. Open hole CNL/FDC/GR, DIL/SP, Microlog, Sonic, and dipmeter/BH Verticality logs may be run from 7,200' to TD. Two sets of cutting samples will be collected every 10' from 7,200' to TD.

## 7. DOWNHOLE CONDITIONS

The maximum anticipated bottom hole pressure is  $\approx 3,900$  psi. No abnormal pressures, temperatures, or hydrogen sulfide are expected (Nevertheless, a hydrogen sulfide contingency plan will be submitted under separate cover). A fish (e.g., 10" bullnose off a log), water flows, and lost circulation are expected.

The well was originally drilled (as the then Soda Unit 1) by Shell in 1959 who set 10-3/4" 40.5# surface casing at 1610' with 800 sx. The well was P&A in January 1960 with 75 sx from 6350' to 6200', 75 sx from 5000' to 4850', 140 sx from 1610' to 1535', and 10 sx at surface.

## 8. MISCELLANEOUS

The anticipated spud date is December 1, 1995. It is expected it will take  $\approx 15$  to  $\approx 20$  days to drill the well and  $\approx 15$  days to complete the well.

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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Surface Use Plan

1. EXISTING ROADS & DIRECTIONS (See PAGES 11 & 12)

From the Escalante Post Office, Utah, go E  $\approx$ 5.3 miles on Utah 12.  
Then turn right and go southeast  $\approx$ 36.7 mi. on the Hole in the Rock Road.  
Then turn left onto the wellsite.

2. ROAD TO BE BUILT OR UPGRADED

No new road or upgraded road is needed.

3. EXISTING WELLS

There are no existing oil, gas, water, injection, or disposal wells within a 1 mile radius.

4. PROPOSED PRODUCTION FACILITIES

Production facilities may include four to five 16' high 500 bbl or 20' high 400 bbl tanks. Three steel tanks will for oil. One fiberglass tank will be for water. Vertical 4 x 20 heater-treater and 2 x 10 two stage separators may also be on site. The pumpjack and these facilities will be painted a flat tan color. Painting will be completed within 6 months of installation. Parts required to comply with OSHA colors will be excluded.

The tank battery will be surrounded by a dike of sufficient capacity to contain 150% of the storage capacity of the battery. All loading lines will be placed inside the dike.

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
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#### 5. WATER SUPPLY

Water will be trucked from the Tamarix Ranch in Escalante. An Application to Appropriate Water has been filed with the State of Utah Div. of Water Rights. Ranch owner has consented.

#### 6. CONSTRUCTION MATERIALS & METHODS

The top ≈6" of soil will be stripped and stockpiled north of the pad. A diversion ditch will be cut on the east side of the pad to keep runoff away from the pad. The reserve pit will be lined with minimum 12 mil plastic. If excavation of Shell's old pit proves troublesome, then the pad will be rotated to avoid further excavation of the old pit.

#### 7. WASTE DISPOSAL

At least half of the reserve pit capacity will be in cut. Any junk excavated from the old reserve pit will be buried in place on the pad. The pit will be fenced 4' high on 3 sides with 4 strands of barbed wire or woven wire topped with barbed wire. The 4th side will be fenced once the rig moves off hole. The fence will be kept in good repair while the pit dries.

All trash will be placed in a trash cage. 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.

#### 8. ANCILLARY FACILITIES

There will be no airstrip or formal camp. Camper trailers will be on site for the company man, roughnecks, mud logger, tool pusher, etc.

**PERMITS WEST**, INC.  
PROVIDING PERMITS for LAND USERS

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
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## 9. WELL SITE LAYOUT

See PAGES 13 & 14 for depictions of the well pad, cross sections, cut and fill diagrams, reserve pit, burn pit, access road onto the pad, parking, living facilities, and rig orientation.

## 10. RECLAMATION

After completing drilling, the wellsite and immediate area will be cleared of all debris, material, and junk not needed for production.

Reclamation will start when the reserve pit is dry. All areas not needed for production will be backfilled, recontoured to match natural contours, and reserved topsoil and brush evenly spread. If the well is a producer, then enough topsoil will be kept aside to reclaim the rest of the pad. Disturbed areas will be ripped, harrowed, or scarified before seeding. That pile of topsoil and all reclaimed areas will be broadcast seeded in late fall with the below mixture. Seeded areas will be left rough and lightly harrowed or drug with a chain after seeding.

- 4 lb/ac Indian ricegrass
- 4 lb/ac needle and thread grass
- 4 lb/ac fourwing saltbush
- 2 lb/ac sand dropseed
- 1 lb/ac galleta grass
- 1 lb/ac black grama grass

## 11. SURFACE OWNER

The pad is all on one lease on state land managed by the Utah Div. of State Lands & Forestry.

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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12. OTHER INFORMATION

If cultural resources are found during construction, all work will stop in that area and the State Historic Preservation Office notified. Rangeland will inform everyone in the area associated with the well that they are subject to prosecution for disturbing historic or archaeology sites or for collecting artifacts.

13. REPRESENTATION AND CERTIFICATIONS

Anyone having questions concerning the APD should contact:

Brian Wood  
Permits West, Inc.  
37 Verano Loop  
Santa Fe, NM 87505  
(505) 466-8120 FAX: (505) 466-9682 Mobile: (505) 699-2276

The field representative for Rangeland will be:

Terry Michael  
Rangeland Petroleum Corporation  
P.O. Box 232  
Midland, Tx. 79702  
(915) 686-8983

I hereby certify Rangeland Petroleum Corporation has the necessary consents from the proper lease and unit interest owners to conduct lease and unit operations in conjunction with this APD. Bond coverage for lease activities will be provided by Rangeland Petroleum Corporation.

I hereby certify I have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge,

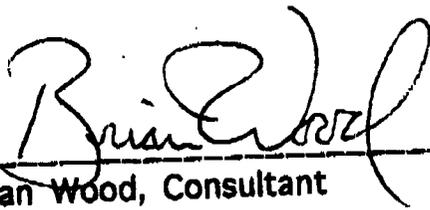
**PERMITS WEST** INC.  
PROVIDING PERMITS for LAND USERS

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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true and correct; and that the work associated with operations proposed herein will be performed by Rangeland Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
\_\_\_\_\_  
Brian Wood, Consultant

November 17, 1995  
Date

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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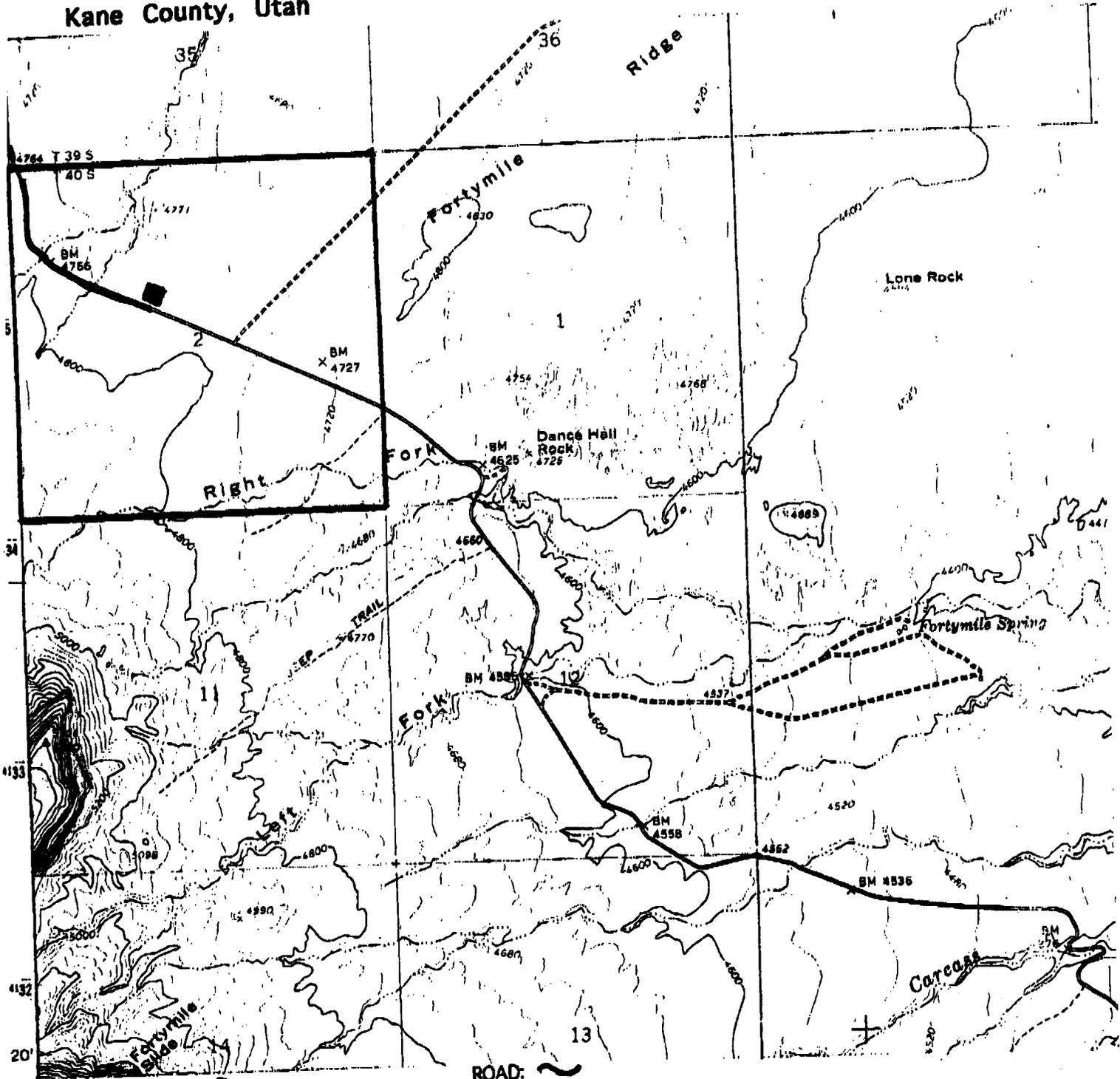
PROPOSED WELL: ●

ACCESS ROUTE: ~

**PERMITS WEST**.INC.  
PROVIDING PERMITS for LAND LISERS

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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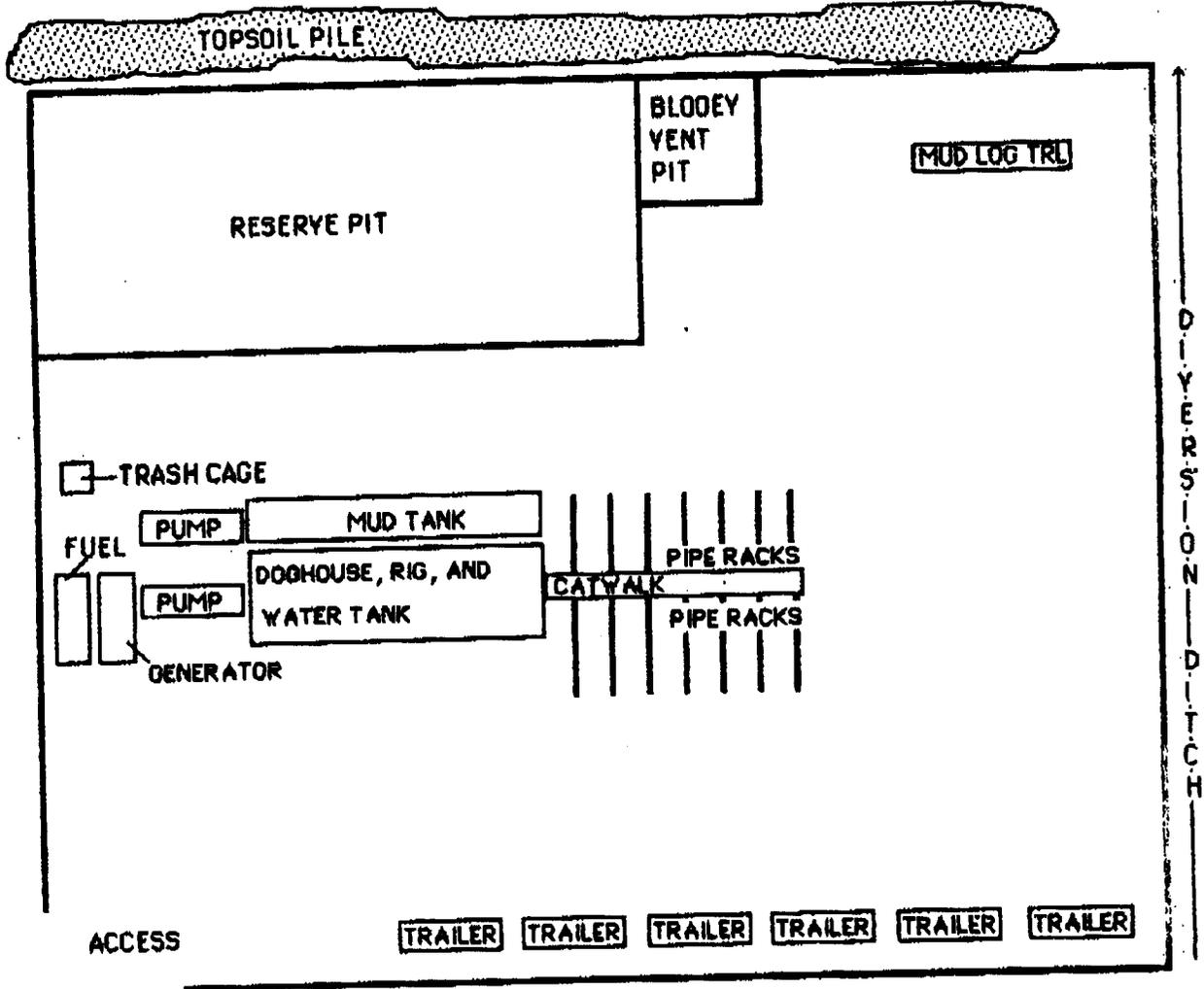
WELL: ■

LEASE: **┌**

Rangeland Petroleum Corporation  
 W-T State "2" #1-B  
 1988' FNL & 1983' FWL  
 Sec. 2, T. 40 S., R. 7 E.  
 Kane County, Utah

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FLARE PIT



EXISTING COUNTY ROAD



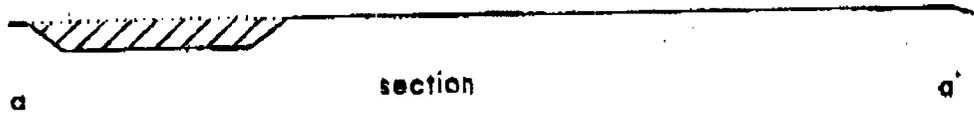
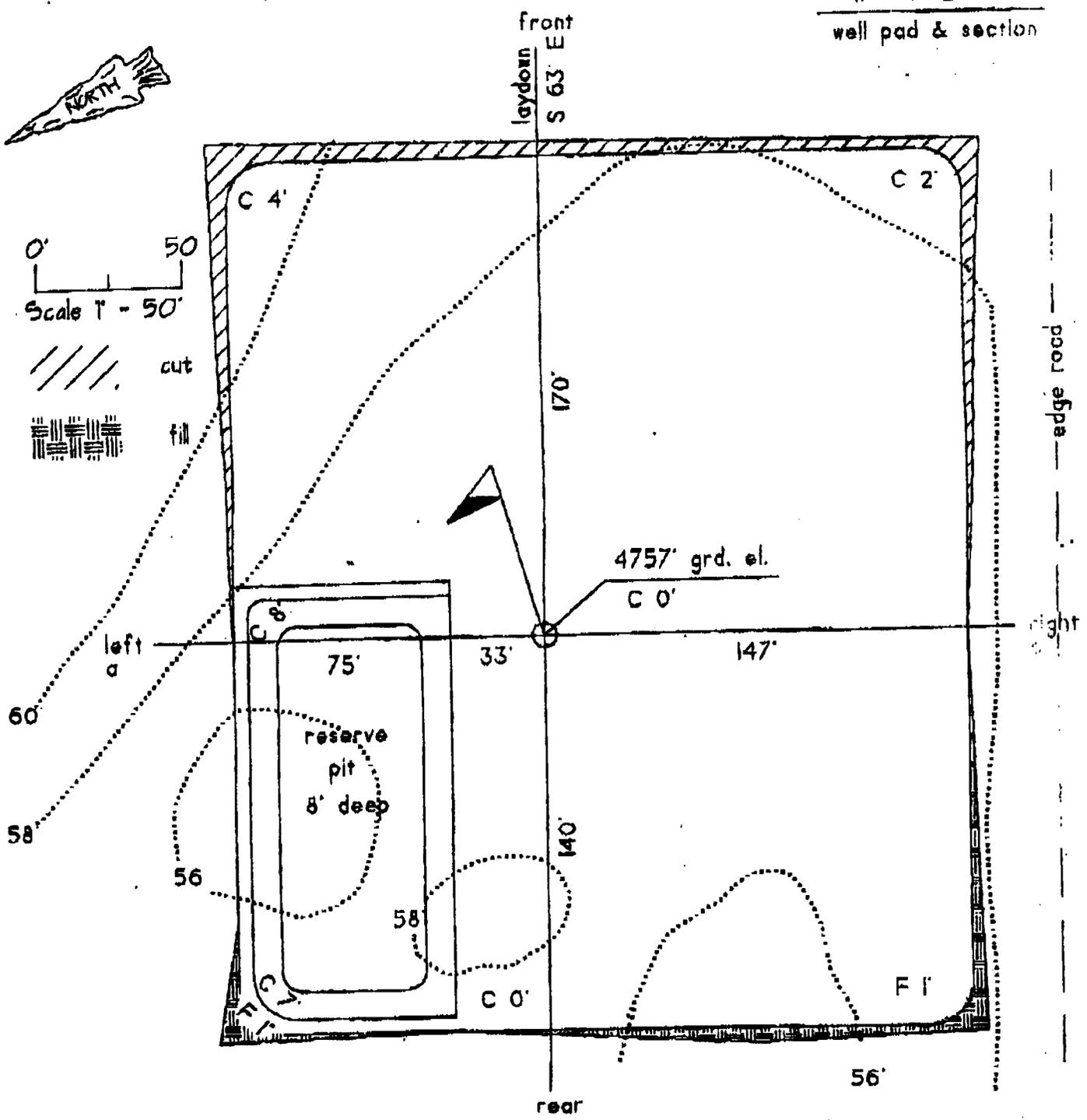
**PERMITS WEST, INC.**  
 PROVIDING PERMITS for LAND USERS

W - T 2' # 1  
well pad & section



0' 50'  
Scale 1" = 50'

cut  
fill



COMPANY **Shell Oil Company**

CONTRACTOR **Great Western Drilling Company**

LEASE **Snake Hill #1**

WELL NO. **#1**

STOCK POINT **WATERFALL, WYO.**

Date Yr. 1966	Ticket No.	Invoice No.	Mopcoob	Mopcobor	Soft Gel	Salt	My Lo Jel	My Lo Jel Pres.	SPACER SAND	Mud Flour	Hulls	Lime	DRILL MUD	T.S.P.P.	Defoamer	Misc	Major Filter	Filter Paper	Major Seal	Chlor Seal	Chemicals	Concrete	Brick	Gravel	Dray	SP Per Cub Yd
11/20	591	440																								13.00
11/20	592										10					61	50	50	92					3		13.47
11/20	593																110	15	20	10	10					15.00
11/22	594	440																								15.00
11/23	595								100								160									21.00
11/23	596						40					35							25	30	40	35				15.00
11/23	597	440																								11.00
11/23	598		420																							15.70
12/12	599							35				15				50							25	50		12.47
12/18	600								30								100	105								26.00
12/23	5326								35								105	70								23.10
12/25	5327	440																								13.00
12/27	5328	340																								11.50
12/29	5329	140																								10.00
12/29	5330	340																								25.00
1/2	5331								120								60									11.00
1/6	5332																60	200								21.00
Net Quantity			2510	420				95	313		10	50				41	141	100	411	50	65	65	3			
Unit Cost																										
Cost																										603.00

Material Cost \$ \_\_\_\_\_

Drayage \$ \_\_\_\_\_

Total Cost \$ 603.00

260 P02

RANGELAND EXPLORATION

11-17-95 15:03



STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5. Lease Designation and Serial Number:  
**ML-45294**

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

6. If Indian, Allottee or Tribe Name:  
**N/A**

1A. Type of Work: **DRILL**  **DEEPEN**

7. Unit Agreement Name:  
**N/A**

B. Type of Well: **OIL**  **GAS**  **OTHER:**  **SINGLE ZONE**  **MULTIPLE ZONE**

8. Farm or Lease Name:  
**W-T STATE "2"**

2. Name of Operator:  
**RANGELAND PETROLEUM CORPORATION**

9. Well Number:  
**# 1 - B**

3. Address and Telephone Number:  
**210 NORTH MAIN ST., MIDLAND, TX. 79701 (915) 686-8983**

10. Field and Pool, or Wildcat:  
**WILDCAT**

4. Location of Well (Footages)  
At Surface: **1988' FNL & 1983' FWL**  
At Proposed Producing Zone: **SAME**

11. Ctr/Ctr, Section, Township, Range, Meridian:  
**SENW 2-40S-7E**

14. Distance in miles and direction from nearest town or post office:  
**42 MILES SE OF ESCALANTE**

12. County: **KANE** 13. State: **UTAH**

15. Distance to nearest property or lease line (feet): **1983'**

16. Number of acres in lease: **1280**

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: **10,500'**

20. Rotary or cable tools: **ROTARY**

21. Elevations (show whether DF, FT, GP, etc.): **4,757' UNGRADED**

22. Approximate date work will start: **DEC. 1, 1995**

**23. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9"	7-5/8" WC-70	29.7#	400'	675 SX & TO SURFACE
9"	7-5/8" WC-70	26.4#	4,800'	"
9"	7-5/8" WC-50	26.4#	5,400'	"
9"	7-5/8" WC-50	29.7#	7,200'	"
6-1/2"	4-1/2" J-55/N-80	11.6#	10,500'	400 SX & TO 7,000'

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

This wellbore was originally drilled by Shell as the Soda Unit #1 in 1959 and subsequently plugged and abandoned.

Rangeland is cancelling its W-T State "2" #1 (1980' FN & 660' FE 2-40s-7e) APD dated 10-17-95. This APD will replace that APD.

Rangeland Petroleum Corporation is now lessee of record. Designation of Operator from Ben Donegan dated 10-23-95 is now canceled.

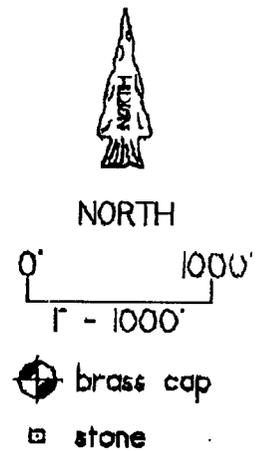
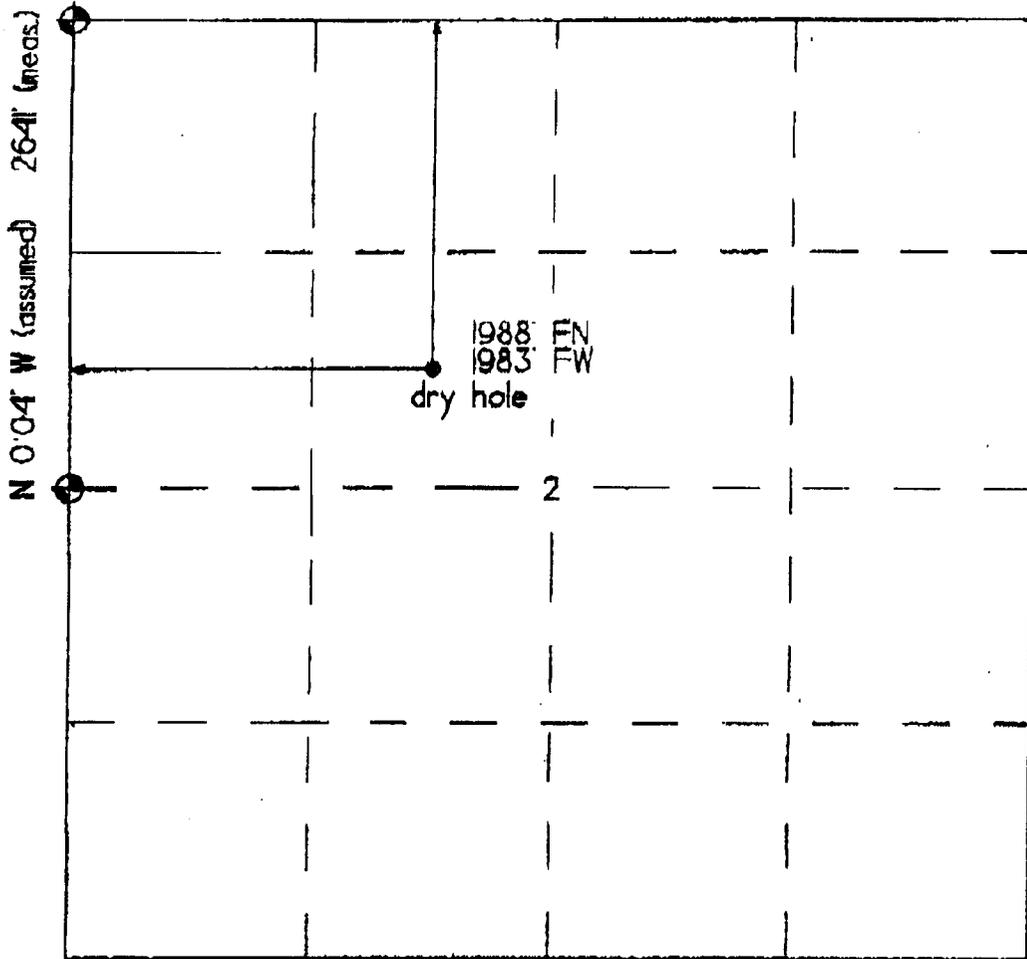
24. Name & Signature: *Rina [Signature]* (505) 466-8120 Title: CONSULTANT Date: 11-17-95

(This space for State use only)

API Number Assigned: 43-025-11036

Approval:

Well Location Plat



Well Location Description

RANGELAND EXPLORATION COMPANY  
W - T 2' # 1  
1988' FNL & 1983' FWL  
Section 2, T.40 S., R.7 E., SLM  
4757' grd. el.  
Kane County, UT



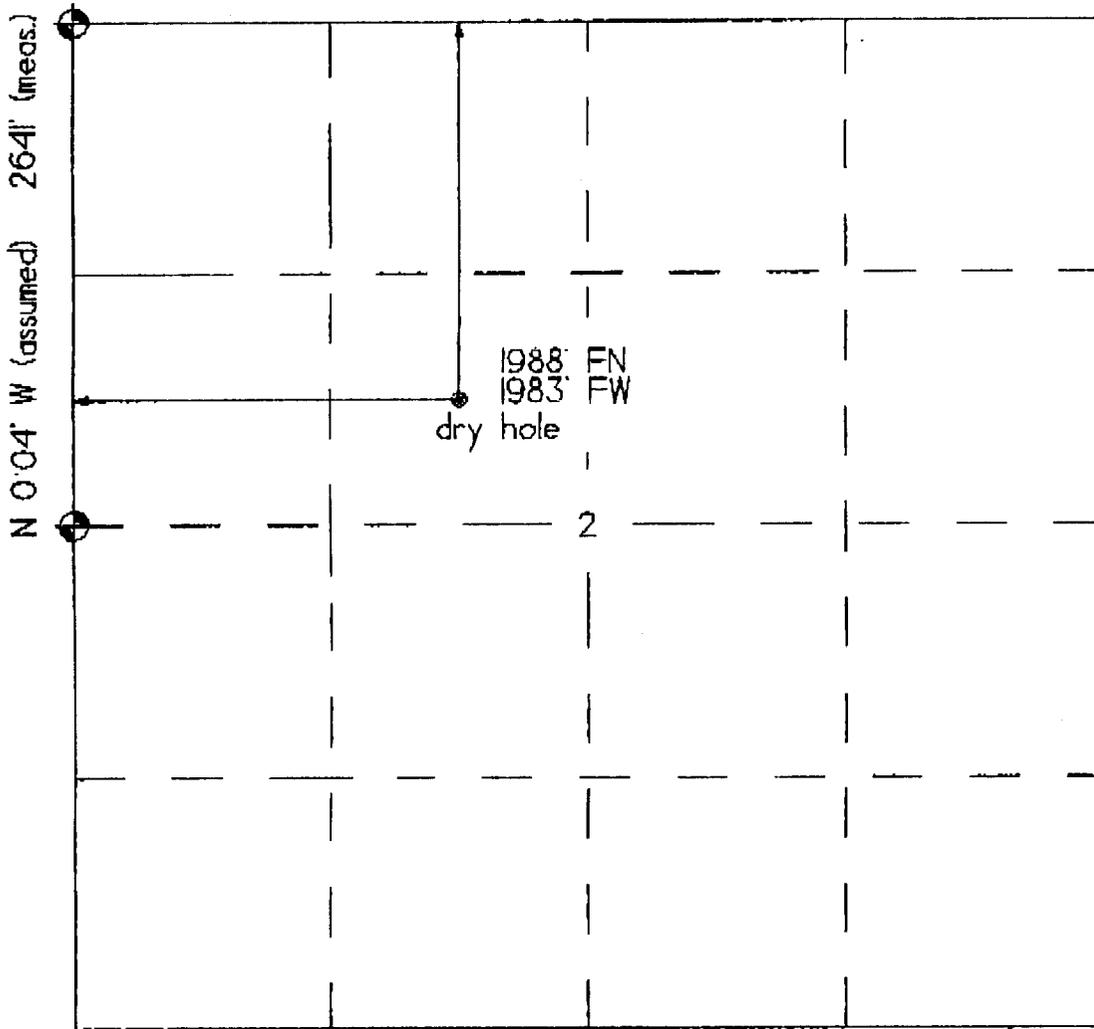
1 November 1995

*Gerald G. Huddleston*  
Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.

HUDDLESTON LAND SURVEYING - BOX KK - CORTEZ, CO - (970) 565 -3330

Well Location Plat



Well Location Description

RANGELAND EXPLORATION COMPANY  
 W - T 2' # 1  
 1988' FNL & 1983' FWL  
 Section 2, T.40 S., R.7 E., SLM  
 4757' grd. el.  
 Kane County, UT



11 November 1995

*Gerald G. Huddleston*

Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.

#11

FORM 3

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

<b>APPLICATION FOR PERMIT TO DRILL OR DEEPEN</b>		5. Lease Designation and Serial Number: <b>ML-45294</b>	
1A. Type of Work: <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input checked="" type="checkbox"/>		6. If Indian, Allottee or Tribe Name: <b>N/A</b>	
8. Type of Well: <b>OIL</b> <input checked="" type="checkbox"/> <b>GAS</b> <input type="checkbox"/> <b>OTHER:</b> _____		7. Unit Agreement Name: <b>N/A</b>	
3. Name of Operator: <b>RANGELAND PETROLEUM CORPORATION</b>		8. Farm or Lease Name: <b>W-T STATE "2"</b>	
9. Address and Telephone Number: <b>210 NORTH MAIN ST., MIDLAND, TX. 79701 (915) 686-8983</b>		9. Well Number: <b># 1 - B</b>	
4. Location of Well (Footages) At Surface: <b>1988' FNL &amp; 1983' FWL</b> At Proposed Producing Zone: <b>SAME</b>		10. Field and Pool, or Wildcat: <b>WILDCAT</b>	
11. Ctr/Ctr, Section, Township, Range, Meridian: <b>SENW 2-40S-7E</b>		14. Distance in miles and direction from nearest town or post office: <b>42 MILES SE OF ESCALANTE</b>	
12. County: <b>KANE</b>		13. State: <b>UTAH</b>	
16. Distance to nearest property or lease line (feet): <b>1983'</b>	18. Number of acres in lease: <b>1280</b>	17. Number of acres assigned to this well: <b>40</b>	
18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet): <b>N/A</b>	19. Proposed Depth: <b>10,500'</b>	20. Rotary or cable tool: <b>ROTARY</b>	
21. Elevations (show whether DF, RT, GR, etc.): <b>4,757' UNGRADED</b>		22. Approximate date work will start: <b>DEC. 1, 1995</b>	

**23. PROPOSED CASING AND CEMENTING PROGRAM**

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Rangeland Petroleum Corporation is now lessee of record. Designation of Operator from Ben Donegan dated 10-23-95 is now canceled.

24. Name & Signature: Ryan [Signature] (505) 466-8120 Title: CONSULTANT Date: 11-17-95

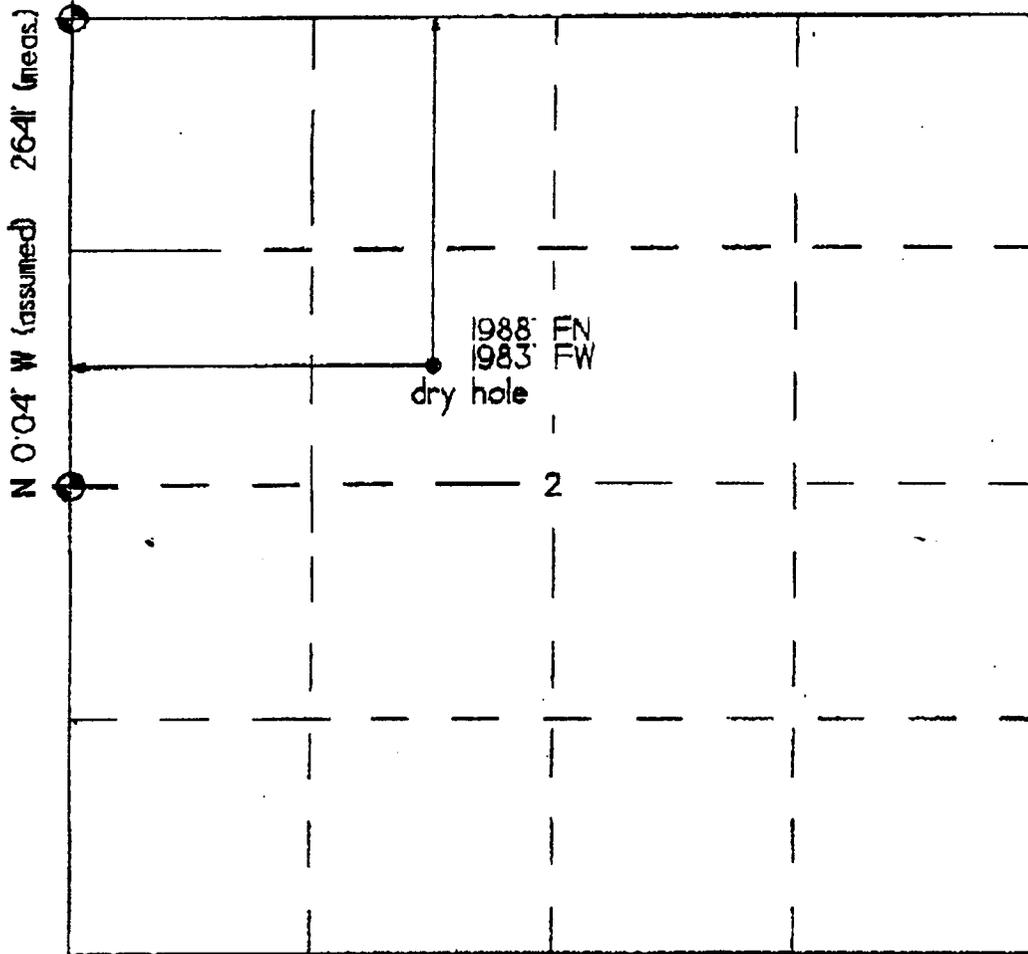
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API Number Assigned: 43-025-11036

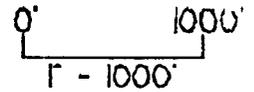
Approval:

H 11

Well Location Plat



NORTH



⊕ brass cap

□ stone

Well Location Description

RANGELAND EXPLORATION COMPANY

W - T 2" # 1

1988' FNL & 1983' FWL

Section 2, T.40 S., R.7 E., SLM

4757' grd. el.

Kane County, UT



1 November 1995

*Gerald G. Huddleston*  
Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.

HUDDLESTON LAND SURVEYING - BOX KK - CORTEZ, CO - (970) 565 -3330

Orig file  
11/20/95: JWC  
BJ R5F

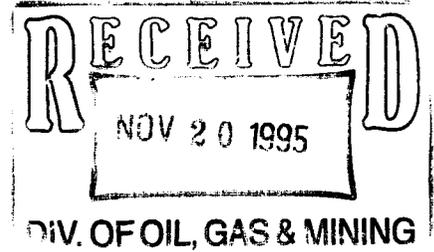


# Southern Utah Wilderness Alliance

1471 South 1100 East  
Salt Lake City, UT 84105

November 16, 1995

Mr. James Carter  
Utah Division of Oil, Gas and Mining  
355 West North Temple  
Salt Lake City, UT 84101



Dear Jim:

The Southern Utah Wilderness Alliance is deeply concerned about the proposal by Rangeland Petroleum Corporation's W-T State 2 #1 well because of its potential impacts on the scenic and wilderness values of the Escalante canyon country and the historic values of the nearby Dance Hall Rock.

So that we may better understand the potential impacts of this project, we request responses to the following questions before the any permits for drilling are issued by the Division.

- 1) How will Rangeland Petroleum Corp. access the drill site?
- 2) How much surface disturbance is expected?
- 3) What are the anticipated impacts to botanical and wildlife resources in the area? Have site surveys been done for these resources at the drill site?
- 4) Has an archeological clearance been done for this proposal?
- 5) What will be the source for the water associated with the well drilling?
- 6) Where and how will the drilling muds be disposed of?
- 7) What will be the composition of materials stored in the reserve pits? Where and how will these materials be disposed of?
- 8) Has UDOGM considered the impacts of the drilling of the region's natural quiet values?
- 9) Will the drill rig be lit?
- 10) How will this area be reclaimed following drilling?
- 11) Will there be flaring of natural gas?
- 12) If oil is struck in commercial quantities, how will that oil be transported (e.g. oil tanker trucks on the Hole in the Rock Road, oil pipeline, etc.)
- 13) To what extent does the Division consider the land use plan of the BLM for this area?
- 14) Has UDOGM consulted with the Glen Canyon National Recreation Area, BLM, or the Advisory Council for Historic Preservation?
- 15) Has UDOGM formulated an emergency clean-up plan for any on-site or transportation-related disasters in this sensitive area?

We appreciate a response to these inquiries at your earliest convenience. If some of these matters are beyond the purview of Division activities, please consult with Trust Lands Administration in the formulation of your responses.

Thank you for your cooperation.

Sincerely,



Ken Rait  
Issues Director

cc: Kevin Carter, Trust Lands Administration  
BLM  
U.S. Department of the Interior



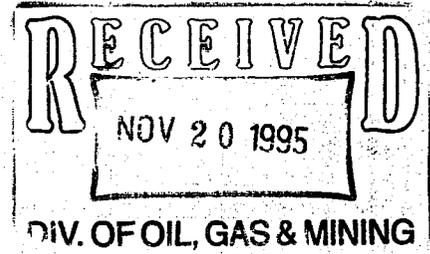
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1/20/95  
BJ  
JWC  
RSF

# Southern Utah Wilderness Alliance

1471 South 1100 East  
Salt Lake City, UT 84105

November 16, 1995

Mr. James Carter  
Utah Division of Oil, Gas and Mining  
355 West North Temple  
Salt Lake City, UT 84101



Dear Jim:

The Southern Utah Wilderness Alliance is deeply concerned about the proposal by Rangeland Petroleum Corporation's W-T State 2 #1 well because of its potential impacts on the scenic and wilderness values of the Escalante canyon country and the historic values of the nearby Dance Hall Rock.

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Sincerely,



Ken Rait  
Issues Director

cc: Kevin Carter, Trust Lands Administration  
BLM  
U.S. Department of the Interior

43-025-11036

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. Lease Designation and Serial Number: **ML-45294**

6. If Indian, Allottee or Tribe Name: **N/A**

7. Unit Agreement Name: **N/A**

8. Farm or Lease Name: **W-T STATE "2"**

9. Well Number: **# 1 - B**

10. Field and Pool, or Wildcat: **WILDCAT**

11. Ctr/Ctr, Section, Township, Range, Meridian: **SENW 2-40S-7E**

12. County: **KANE** 13. State: **UTAH**

14. Distance in miles and direction from nearest town or post office: **42 MILES SE OF ESCALANTE**

15. Distance to nearest property or lease line (feet): **1983'** 16. Number of acres in lease: **1280** 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: **10,500'** 20. Rotary or cable tools: **ROTARY**

21. Elevations (show whether DF, RT, GR, etc.): **4,757' UNGRADED** 22. Approximate date work will start: **DEC. 1, 1995**

PROPOSED CASING AND CEMENTING PROGRAM

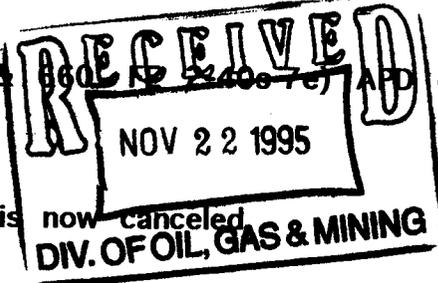
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9"	7-5/8" WC-70	29.7#	400'	675 SX & TO SURFACE
9"	7-5/8" WC-70	26.4#	4,800'	"
9"	7-5/8" WC-50	26.4#	5,400'	"
9"	7-5/8" WC-50	29.7#	7,200'	"
6-1/2"	4-1/2" J-55/N-80	11.6#	10,500'	400 SX & TO 7,000'

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

This wellbore was originally drilled by Shell as the Soda Unit #1 in 1959 and subsequently plugged and abandoned.

Rangeland is cancelling its W-T State "2" #1 (1980' FN & 360' RT & 240' GR) APD dated 10-17-95. This APD will replace that APD.

Rangeland Petroleum Corporation is now lessee of record. Designation of Operator from Ben Donegan dated 10-23-95 is now canceled.



24. Name & Signature: Ryan [Signature] (505) 466-8120 Title: CONSULTANT Date: 11-17-95

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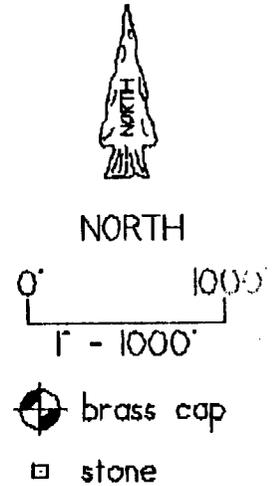
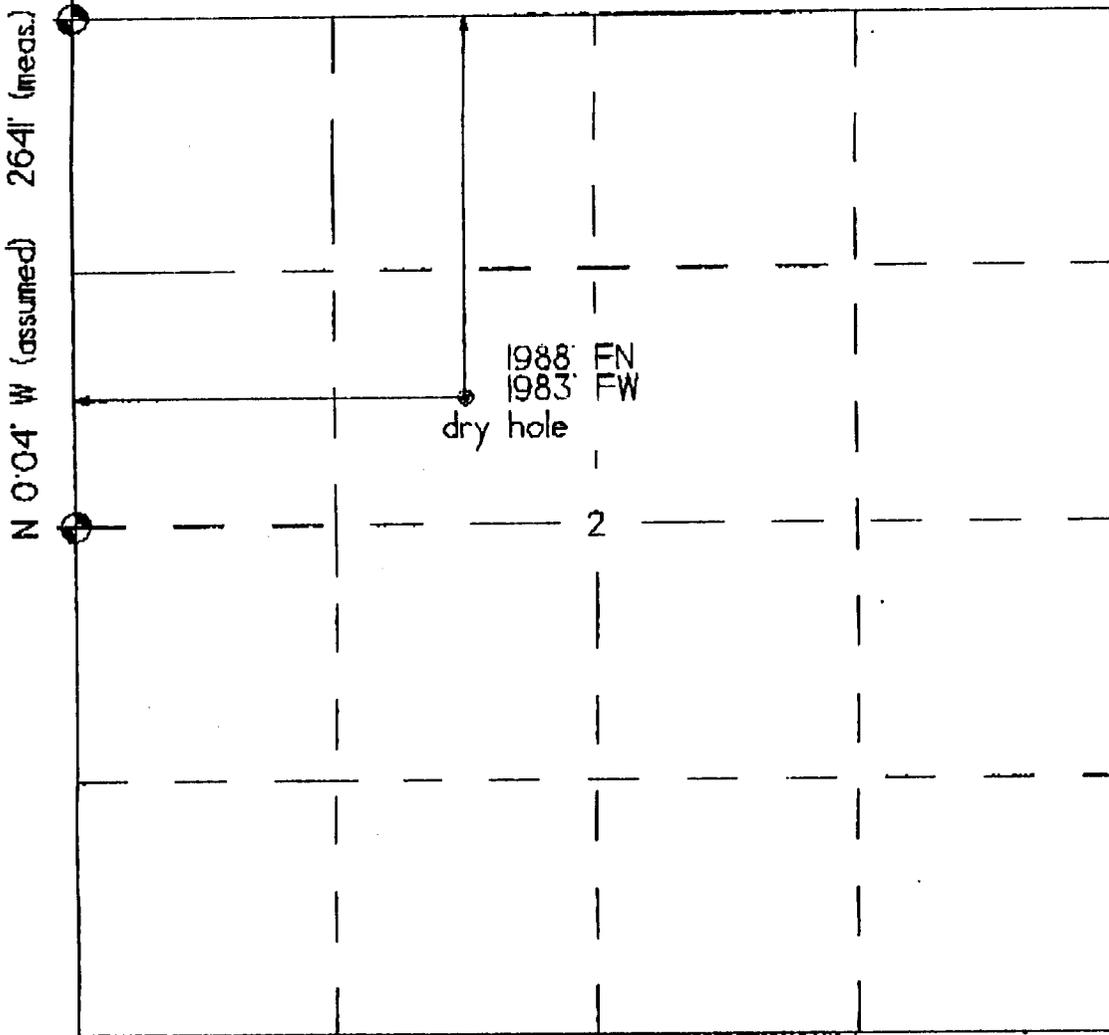
API Number Assigned: 43-025-11036

Approval: DATE: 11/30/95 BY: [Signature]

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS AND MINING

CONFIDENTIAL

Well Location Plat



Well Location Description

RANGELAND EXPLORATION COMPANY  
W - T. 2" # 1  
1988' FNL & 1983' FWL  
Section 2, T.40 S., R.7 E., SLM  
4757' grd. el.  
Kane County, UT



11 November 1995

*Gerald G. Huddleston*

Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.

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Drilling Program

<u>1. Formation Name</u>	<u>Depth from GL</u>	<u>Depth from KB</u>	<u>Subsea Depth</u>
Entrada Ss	0'	12'	+4,757'
Navajo Ss	264'	276'	+4,493'
Kayenta Ss	1,497'	1,509'	+3,260'
Wingate Ss	1,750'	1,762'	+3,007'
Chinle Shale	2,058'	2,070'	+2,699'
Moenkopi	2,801'	2,813'	+1,956'
Kaibab Ls	3,028'	3,040'	+1,729'
Coconino Ss	3,073'	3,085'	+1,684'
Organ Rock	3,404'	3,416'	+1,353'
Cedar Mesa Ss	3,935'	3,947'	+ 822'
Upper Hermosa	5,328'	5,340'	- 571'
Molas	5,911'	5,923'	-1,154'
Redwall Ls	6,108'	6,120'	-1,351'
Ouray Ls	6,703'	6,715'	-1,946'
Elbert Ls	6,931'	6,943'	-2,174'
Lynch (Muav) Ls	7,118'	7,130'	-2,361'
Bright Angel	8,278'	8,290'	-3,521'
Tapeats Ss	8,578'	8,590'	-3,821'
Precambrian Shale	8,828'	8,840'	-4,071'
Total Depth (TD)	10,500'	10,512'	-5,743'

\* All depths are based on an ungraded ground level of 4,757'.

2. NOTABLE ZONES

Tapeats sandstone is the target zone. Uranium can be found in the Chinle. No other mineral zones are expected. Water zones include the Entrada-Wingate interval and Redwall.

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3. PRESSURE CONTROL (Also see "5." on PAGE 4)

A backhoe will dig out cellar. A 10-3/4" casing stub and 3000# 10-3/4" x 11" wellhead with base plate will be welded onto the surface casing. Cellar will be cemented with Redimix. WOC for 48 hours. NU wellhead, annular preventer, and rotating head. Flange up gas buster.

A 13-5/8" x 2000 psi annular preventer will be used from surface casing to ≈7,200'. An 11" x 3,000 psi double ram BOP with 3,000 psi choke manifold will be used from ≈7,200' (intermediate casing point) to TD. (Typical BOPs are on the next page. Actual models will not be known until the bid is let.) Pressure test casing and annular preventer to 1,000 psi before drilling out of surface casing. Test valves, manifold, lines, pipe, and blank to 3,000 psi before drilling out intermediate casing. Place test plug in bottom of wellhead and retest surface equipment every 30 days.

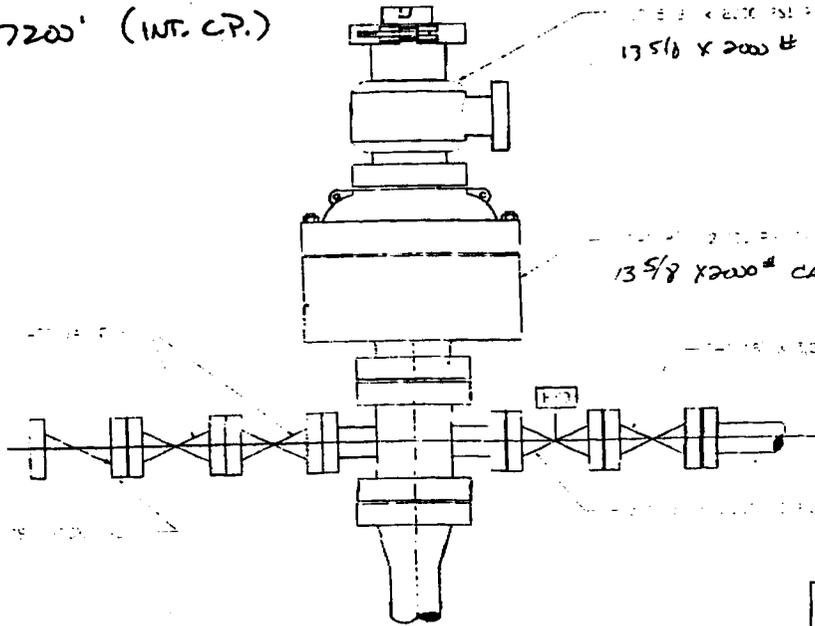
BOP system will be consistent with API RP53. BOP controls will be installed before drilling the intermediate casing plug, and will stay in use until the well is completed or abandoned. BOPs will be inspected and operated at least daily to assure good mechanical working order. All BOP mechanical tests, pressure tests, and inspections will be recorded on the drillers log or daily drilling report.

4. CASING & CEMENTING

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>Setting Depth</u>
9"	7-5/8"	29.7#	WC-70	LT&C	New	400'
9"	7-5/8"	26.4#	WC-70	LT&C	New	4,800'
9"	7-5/8"	26.4#	WC-50	ST&C	New	5,400'
9"	7-5/8"	29.7#	WC-50	LT&C	New	7,200'
6-1/2"	4-1/2"	11.6#	J-55/N-80	LT&C	New	10,500'

Liner hanger set at 7,000'. Tubing head will be 11" 2M x-1/16" 2M LPO.

FROM SURFACE  
CSG TO 7200' (INT. CP.)



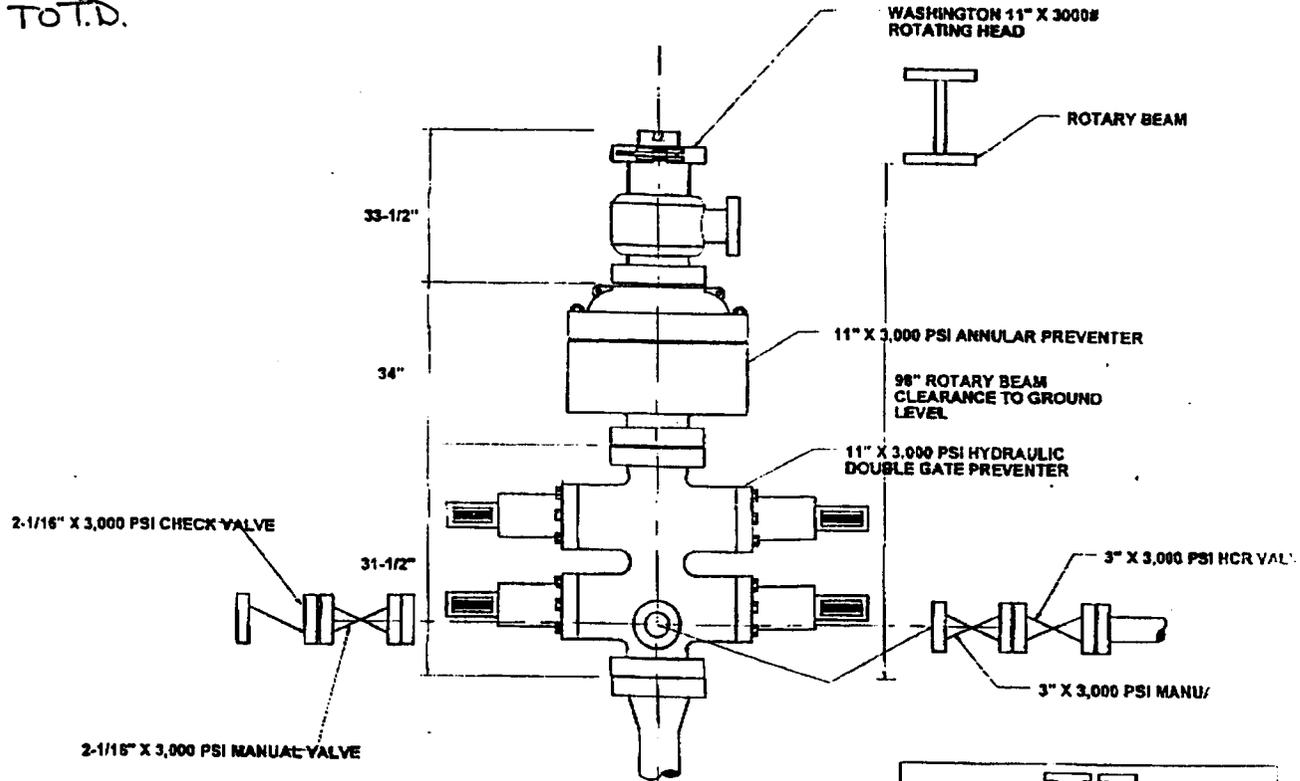
13 5/8" X 2000# ROT. HEAD

13 5/8" X 2000# CAMERON ANNULAR PREVENTER

**EXETER**  
INTERNATIONAL

FILE	DATE	SCALE
RIG 3 BOP	3/14/95	
11" X 3,000# BOP	DRN. BY	RIG
	CH	3

FROM 7200' (INT. CSQ. PL)  
T.O.D.



WASHINGTON 11" X 3000#  
ROTATING HEAD

ROTARY BEAM

33-1/2"

11" X 3,000 PSI ANNULAR PREVENTER

34"

98" ROTARY BEAM  
CLEARANCE TO GROUND  
LEVEL

11" X 3,000 PSI HYDRAULIC  
DOUBLE GATE PREVENTER

2-1/16" X 3,000 PSI CHECK VALVE

31-1/2"

3" X 3,000 PSI HCR VALV

2-1/16" X 3,000 PSI MANUAL VALVE

3" X 3,000 PSI MANU/

**EXETER**  
INTERNATIONAL

FILE	DATE	SCALE
RIG 3 BOP	3/14/95	
11" X 3,000# BOP	DRN. BY	RIG
	CH	3

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

PAGE 4

CONFIDENTIAL

Intermediate casing will be cemented to surface in two stages with stage tool set at  $\approx 2200'$ , float shoe, and float collar. Centralizers will be set  $\approx 7180'$ ,  $\approx 7120'$ ,  $\approx 2220'$ ,  $\approx 2180'$ , and  $\approx 300'$ . Stage 1 lead will be  $\approx 350$  sx (100% excess) standard cement with 3% econolite + 0.25 #/sk Flocele + 0.6% Halad 9 (11.4 ppg, 2.85 cu ft/sk). Stage 1 tail will be  $\approx 100$  sx standard cement + 2%  $\text{CaCl}_2$  (15.6 ppg, 1.19 cu ft/sk). Stage 2 lead will be  $\approx 125$  sx (125% excess) standard cement with 3% econolite + 0.25 #/sk Flocele + 0.6% Halad 9 (11.4 ppg, 2.85 cu ft/sk). Stage 2 tail will be  $\approx 100$  sx standard cement + 2%  $\text{CaCl}_2$  (15.6 ppg, 1.19 cu ft/sk). If a 9-7/8" bit is used instead of a 9" bit, then cement volumes will be increased accordingly (volume of a 9-7/8" hole is 72% larger than a 9" hole with the given casing).

Production casing will be cemented to 7,000' with a lead of  $\approx 400$  sx 50:50 Poz with 1/4#/sk Flocele + 0.6% Halad 9 (14.2 ppg, 1.25 cu ft/sk). Actual volumes will be determined by caliper log.

## 5. MUD PROGRAM

Well will be drilled with air, air mist, and aerated water depending upon hole conditions. Weighted mud and lost circulation material will be on site. A mud logger will be on site once the well is below 7,200' to collect two sets of samples at 10' intervals.

Rig up air package with 2 compressors and mist pump. Drill out surface casing with  $\approx 1750$  scfm air, ream and drill to  $\approx 7200'$ . If tight spots are found and persist, ream with 9-7/8" bit to TD. Mist as necessary to keep hole clean. Change to aerated water if significant water flow is encountered. Intermediate mud will be 5.5 to 6.5 ppg, 28 to 32 viscosity, N/C filtrate, and a pH of 9 to 10.

Production casing will be air drilled with 1400 scf/min, thirty 4-3/4" drill collars, rotating head, gas buster, and air mist as needed.

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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## 6. CORING, TESTING, & LOGGING

No cores are planned. A DST may be run in the Tapeats. Open hole CNL/FDC/GR, DIL/SP, Microlog, Sonic, and dipmeter/BH Verticality logs may be run from 7,200' to TD. Two sets of cutting samples will be collected every 10' from 7,200' to TD.

## 7. DOWNHOLE CONDITIONS

The maximum anticipated bottom hole pressure is  $\approx 3,900$  psi. No abnormal pressures, temperatures, or hydrogen sulfide are expected (Nevertheless, a hydrogen sulfide contingency plan will be submitted under separate cover). A fish (e.g., 10" bullnose off a log), water flows, and lost circulation are expected.

The well was originally drilled (as the then Soda Unit 1) by Shell in 1959 who set 10-3/4" 40.5# surface casing at 1610' with 800 sx. The well was P&A in January 1960 with 75 sx from 6350' to 6200', 75 sx from 5000' to 4850', 140 sx from 1610' to 1535', and 10 sx at surface.

## 8. MISCELLANEOUS

The anticipated spud date is December 1, 1995. It is expected it will take  $\approx 15$  to  $\approx 20$  days to drill the well and  $\approx 15$  days to complete the well.

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

PAGE 6

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## Surface Use Plan

### 1. EXISTING ROADS & DIRECTIONS (See PAGES 11 & 12)

From the Escalante Post Office, Utah, go E  $\approx$ 5.3 miles on Utah 12.  
Then turn right and go southeast  $\approx$ 36.7 mi. on the Hole in the Rock Road.  
Then turn left onto the wellsite.

### 2. ROAD TO BE BUILT OR UPGRADED

No new road or upgraded road is needed.

### 3. EXISTING WELLS

There are no existing oil, gas, water, injection, or disposal wells within a 1 mile radius.

### 4. PROPOSED PRODUCTION FACILITIES

Production facilities may include four to five 16' high 500 bbl or 20' high 400 bbl tanks. Three steel tanks will for oil. One fiberglass tank will be for water. Vertical 4 x 20 heater-treater and 2 x 10 two stage separators may also be on site. The pumpjack and these facilities will be painted a flat tan color. Painting will be completed within 6 months of installation. Parts required to comply with OSHA colors will be excluded.

The tank battery will be surrounded by a dike of sufficient capacity to contain 150% of the storage capacity of the battery. All loading lines will be placed inside the dike.

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5. WATER SUPPLY

Water will be trucked from the Tamarix Ranch in Escalante. An Application to Appropriate Water has been filed with the State of Utah Div. of Water Rights. Ranch owner has consented.

6. CONSTRUCTION MATERIALS & METHODS

The top  $\approx 6$ " of soil will be stripped and stockpiled north of the pad. A diversion ditch will be cut on the east side of the pad to keep runoff away from the pad. The reserve pit will be lined with minimum 12 mil plastic. If excavation of Shell's old pit proves troublesome, then the pad will be rotated to avoid further excavation of the old pit.

7. WASTE DISPOSAL

At least half of the reserve pit capacity will be in cut. Any junk excavated from the old reserve pit will be buried in place on the pad. The pit will be fenced 4' high on 3 sides with 4 strands of barbed wire or woven wire topped with barbed wire. The 4th side will be fenced once the rig moves off hole. The fence will be kept in good repair while the pit dries.

All trash will be placed in a trash cage. 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.

8. ANCILLARY FACILITIES

There will be no airstrip or formal camp. Camper trailers will be on site for the company man, roughnecks, mud logger, tool pusher, etc.

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## 9. WELL SITE LAYOUT

See PAGES 13 & 14 for depictions of the well pad, cross sections, cut and fill diagrams, reserve pit, burn pit, access road onto the pad, parking, living facilities, and rig orientation.

## 10. RECLAMATION

After completing drilling, the wellsite and immediate area will be cleared of all debris, material, and junk not needed for production.

Reclamation will start when the reserve pit is dry. All areas not needed for production will be backfilled, recontoured to match natural contours, and reserved topsoil and brush evenly spread. If the well is a producer, then enough topsoil will be kept aside to reclaim the rest of the pad. Disturbed areas will be ripped, harrowed, or scarified before seeding. That pile of topsoil and all reclaimed areas will be broadcast seeded in late fall with the below mixture. Seeded areas will be left rough and lightly harrowed or drug with a chain after seeding.

- 4 lb/ac Indian ricegrass
- 4 lb/ac needle and thread grass
- 4 lb/ac fourwing saltbush
- 2 lb/ac sand dropseed
- 1 lb/ac galleta grass
- 1 lb/ac black grama grass

## 11. SURFACE OWNER

The pad is all on one lease on state land managed by the Utah Div. of State Lands & Forestry.

**Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah**

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**12. OTHER INFORMATION**

If cultural resources are found during construction, all work will stop in that area and the State Historic Preservation Office notified. Rangeland will inform everyone in the area associated with the well that they are subject to prosecution for disturbing historic or archaeology sites or for collecting artifacts.

**13. REPRESENTATION AND CERTIFICATIONS**

Anyone having questions concerning the APD should contact:

Brian Wood  
Permits West, Inc.  
37 Verano Loop  
Santa Fe, NM 87505  
(505) 466-8120 FAX: (505) 466-9682 Mobile: (505) 699-2276

The field representative for Rangeland will be:

Terry Michael  
Rangeland Petroleum Corporation  
P.O. Box 232  
Midland, Tx. 79702  
(915) 686-8983

I hereby certify Rangeland Petroleum Corporation has the necessary consents from the proper lease and unit interest owners to conduct lease and unit operations in conjunction with this APD. Bond coverage for lease activities will be provided by Rangeland Petroleum Corporation.

I hereby certify I have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge,

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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true and correct; and that the work associated with operations proposed herein will be performed by Rangeland Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.



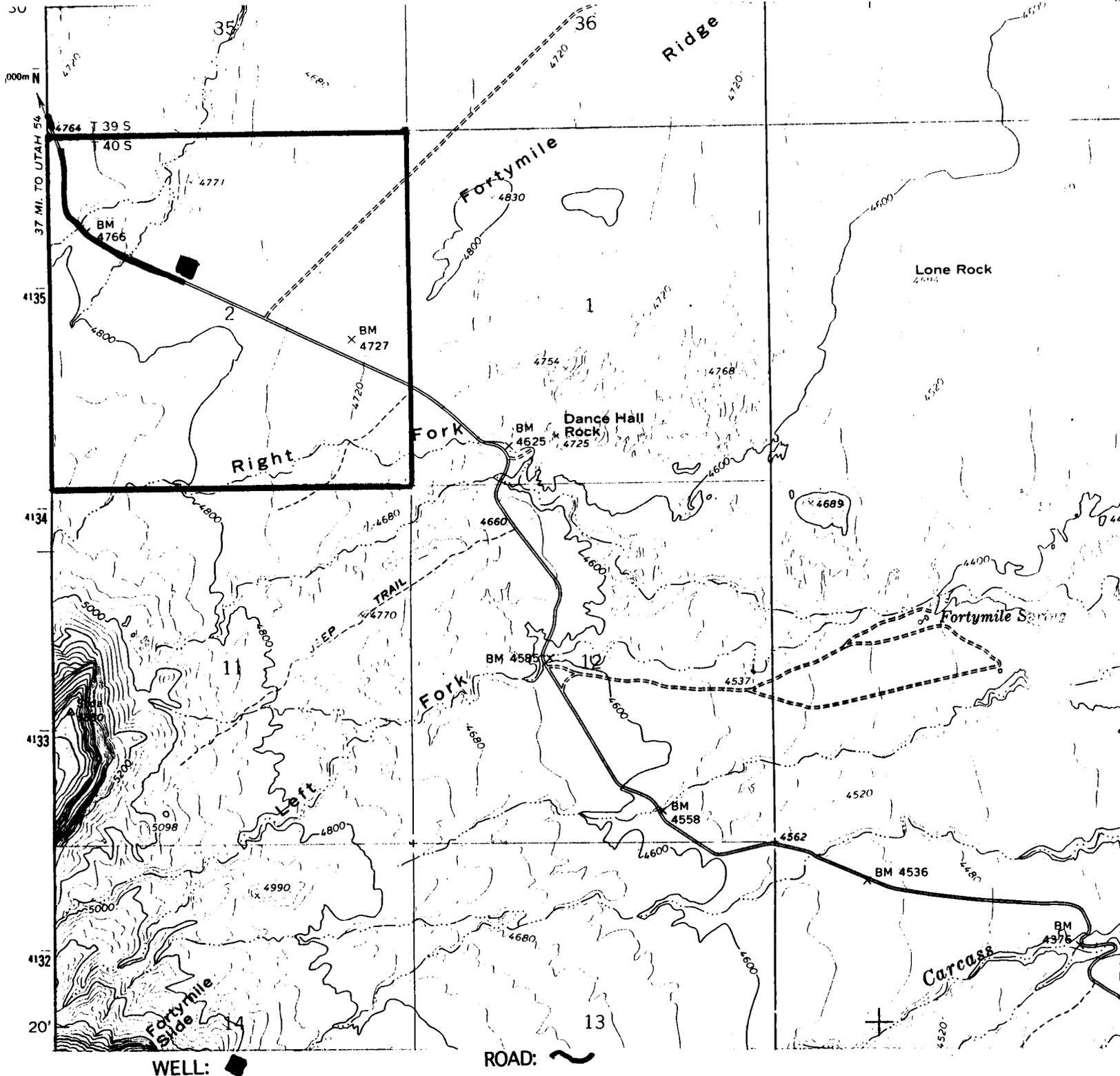
\_\_\_\_\_  
Brian Wood, Consultant

November 17, 1995

Date

Rangeland Petroleum Corporation  
 W-T State "2" #1-B  
 1988' FNL & 1983' FWL  
 Sec. 2, T. 40 S., R. 7 E.  
 Kane County, Utah

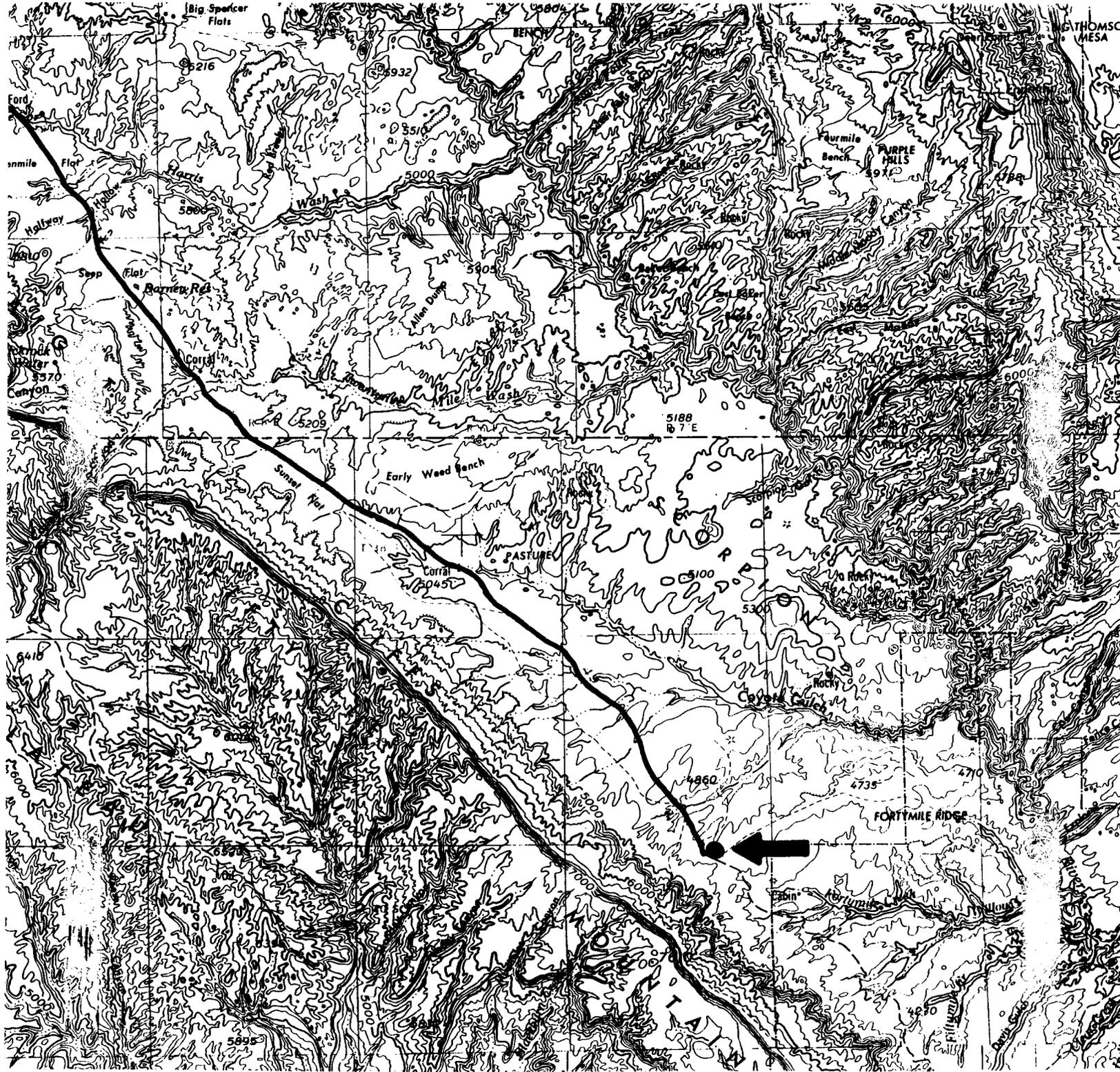
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WELL:   
 LEASE: 

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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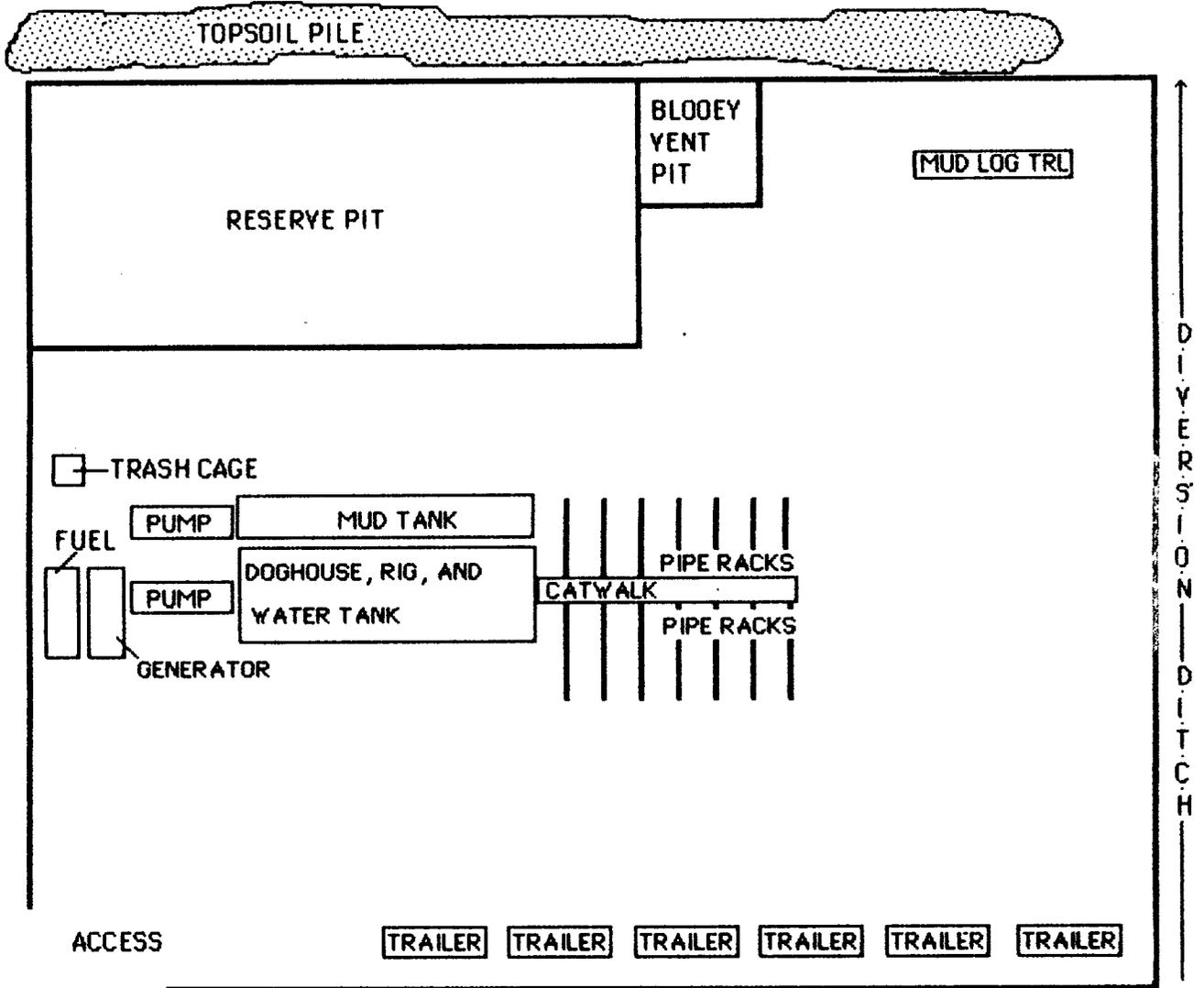
PROPOSED WELL: ●

ACCESS ROUTE: ~

Rangeland Petroleum Corporation  
W-T State "2" #1-B  
1988' FNL & 1983' FWL  
Sec. 2, T. 40 S., R. 7 E.  
Kane County, Utah

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FLARE PIT



EXISTING COUNTY ROAD

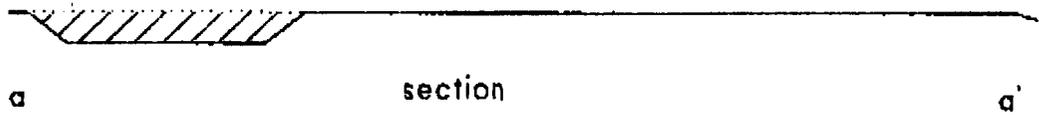
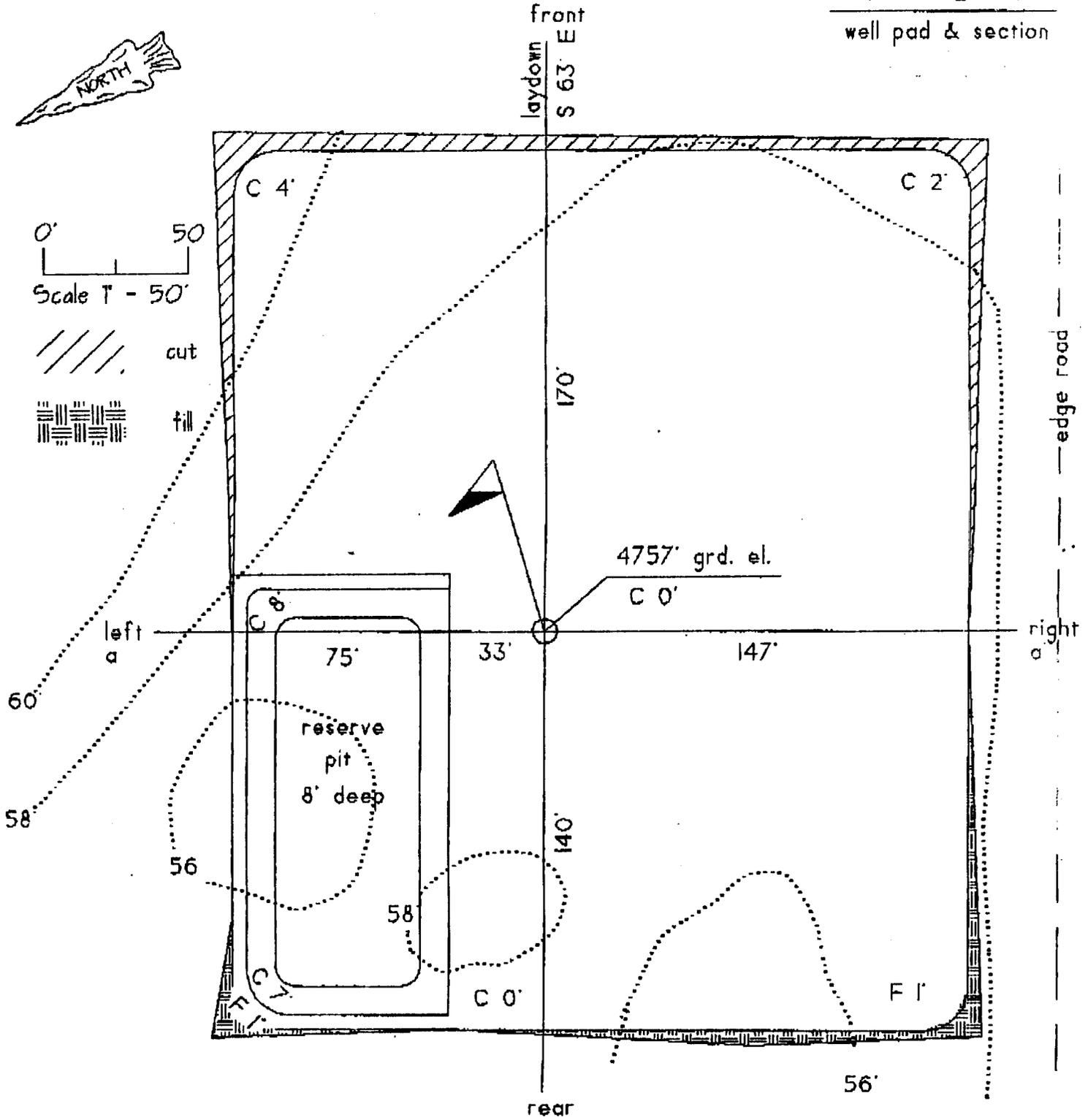


W - T 2 # 1  
well pad & section



0' 50'  
Scale 1" = 50'

cut  
fill





# State of Utah

GOVERNOR'S OFFICE OF PLANNING AND BUDGET  
Resource Development Coordinating Committee

Michael O. Leavitt  
Governor

Brad T. Barber  
State Planning Coordinator

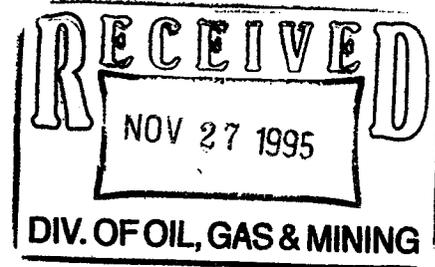
Catherine Quinn  
Committee Chairman

John A. Harja  
Executive Director

116 State Capitol Building  
Salt Lake City, Utah 84114  
(801) 538-1027  
Fax: (801) 538-1547



November 22, 1995



Frank Matthews  
Division of Oil, Gas & Mining  
355 West North Temple, Suite 350  
Salt Lake City, Utah 84180-1203

**SUBJECT:** Application for Permit to Drill wildcat well the W-T State No. 2-1 well on state lease ML-45294  
State Identification Number: UT951027-020

Dear Mr. Matthews:

The Resource Development Coordinating Committee (RDCC), representing the State of Utah, has reviewed this proposal. The Division of Wildlife Resources comments:

Division staff from our Southern Region visited the site with representatives from the Division of Oil, Gas & Mining on October 24. We have no difficulty with this action, however, we would like to be involved in the selection of the seed mixture for rehabilitating the site after drilling.

Please contact Bruce Bonebrake in our Southern Regional Office at (801) 586-2455 if you have any questions.

The Committee appreciates the opportunity to review this proposal. Please direct any other written questions regarding this correspondence to the Utah State Clearinghouse at the above address or call Carolyn Wright at (801) 538-1535, Nancy Keate at (801) 538-1548, or John Harja at (801) 538-1559.

Sincerely,

Brad T. Barber  
State Planning Coordinator

BTB/ar



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

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

November 27, 1995

Ken Rait, Issues Director  
Southern Utah Wilderness Alliance  
1471 South 1100 East  
Salt Lake City, Utah 84105

Re: Rangeland Petroleum Corporation's Proposal to Re-enter and Drill the W-T State 2 #1-B Well Located in SE $\frac{1}{4}$  NW $\frac{1}{4}$ , Section 2, Township 40 South, Range 7 East, Kane County, Utah

Dear Mr. Rait:

The Division of Oil, Gas and Mining ("Division") acknowledges receipt of your letter dated November 16, 1995 which addresses your concerns regarding the potential impacts associated with drilling the W-T State 2 #1 well, SW $\frac{1}{4}$  NW $\frac{1}{4}$ , Section 2, Township 40 South, Range 7 East, Kane County, Utah on state lease ML-45294. Please be advised that Rangeland Petroleum Corporation ("Rangeland") withdrew its application to drill the W-T State 2 #1 well on November 17, 1995 and submitted an application to re-enter and drill the W-T State 2 #1-B well (formerly Soda Unit #1 well), located as referenced above. Therefore the Division's responses to the issues and concerns expressed in your letter will be directed to the proposed action to re-enter, drill and deepen the W-T State 2 #1-B well from its current total depth of 7155' to a depth of 10,500'. Following are responses to the questions expressed in your letter:

1. Rangeland will access the drill site by using the Hole in the Rock road. No new road or upgraded road is needed.
2. The drill site is located adjacent to the Hole in the Rock road and will be constructed on the existing location used to drill the Soda Unit #1 well. The total disturbed area for the drill site will be approximately 310' by 255'.



Page 2  
Ken Rait, Issues Director  
Southern Utah Wilderness Alliance  
November 27, 1995

3. Staff from the Southern Region, Utah Division of Wildlife Resources ("DWR"), has visited the area and reviewed the proposal, and have no difficulty with this action. However, DWR would like to be involved in the selection of the seed mixture for rehabilitating the site after drilling. Also, the Division performed its On-site Pre-drill Evaluation and Review (environmental site assessment) on November 15, 1995 to address these and other issues.
4. A cultural resource inventory was completed on November 11, 1995 by Laurens C. Hammack, Complete Archaeological Service Associates at the request of Brian Wood, Permits West, agent for Rangeland. A 500' by 500' area (5.75 acres) was inventoried for the 310' by 255' (1.81 acre) well pad. The proposed well will completely utilize the abandoned Shell Oil Soda Unit #1 well pad. No significant cultural resource were located within the survey area.
5. Water will be trucked from the Tamarix Ranch in Escalante. An Application to Appropriate Water has been filed with the Utah Division of Water Rights. The ranch owner has consented to this arrangement.
6. The well will be drilled using air, air mist and aerated water depending on hole conditions. Weighted mud and lost circulation material will be on site and a fresh water mud will be used if necessary. The drilling mud will be disposed of in the lined reserve pit if the Division's recommended clean-up levels are met.
7. The composition of the materials remaining in the reserve pit after completion of drilling operations will be a combination of limestone, sandstone and shale drill cuttings, fresh water, bentonite gel (clay), and lost circulation material (cedar fiber, etc.). The reserve pit materials will be allowed to dry, the liner will be folded to encapsulate the dried materials, and the reserve pit area will be backfilled.

8. There is inevitable noise associated with drilling activity. This audible impact may result from the rig's diesel engines, mud pumps, drawworks, and other various activities around the drill rig. Generally, associated rig noise is no longer audible beyond a distance of one mile and only a dull sound from the drilling activity is evident at lesser distances. Engine noise will be reduced in this instance by the use of winterizing shield around the rig floor.
9. The drilling activity will be conducted 24 hours a day for approximately 15-20 days. If completion of the well is warranted, an additional 15 days of activity will be necessary. There are white lights on the rig floor and white and red lights on the derrick. These lights are safety mandated by the Occupation and Safety Health Administration and the Federal Aviation Administration.
10. Following drilling, the reserve pit will be backfilled and the entire disturbed area will be restored as near as possible to the original contours of the land, any available top-soil will be distributed on the location, and the area will be reseeded with native grasses and shrubs as prescribed by the DWR.
11. A minimal amount of natural gas may be flared if drill stem testing operations are conducted during drilling. If the well is completed for production, natural gas may be flared during initial testing operations. Subsequent flaring will be conducted pursuant to the limitations imposed by the applicable rules.
12. If commercial quantities of oil are discovered, the oil would be transported to market by truck using the Hole in the Rock road.
13. This proposed action was submitted to the Resource Development Coordinating Committee (RDCC) by the Division on November 17, 1995. The RDCC, representing the State of Utah, reviews the proposal and coordinates with the Bureau of Land Management and other involved agencies.
14. The Division has not consulted directly with the Glen Canyon National Recreation Area, BLM or the Advisory Council for Historic Preservation. Again the RDCC, representing the State of Utah, reviews the proposal and coordinates with other involved agencies.

Page 4  
Ken Rait, Issues Director  
Southern Utah Wilderness Alliance  
November 27, 1995

15. The Division's present regulatory overview of operations and events at the drill site pursuant to the applicable rules would provide adequate coverage for emergency situations. The Division has not formulated a plan for any transportation-related disasters (off-site occurrences). Responsibility for responding to such events which would probably be spills of fuel, oil or water depends on the location of the spill and whether or not it reached any waters. The responsible party and local authorities should be able to handle such occurrences and seek the assistance if necessary, of the Division and other agencies.

It is the Division's understanding that the School and Institutional Trust Lands Administration is formulating a response to your inquiries. Also as mentioned previously, the proposed action has been submitted to RDCC for its review and comments may be received from RDCC and other concerned agencies.

The Division appreciates the opportunity to respond to your concerns. The Division's objective in permitting this drilling activity is to balance the development of the area's oil and gas resources with protection of its environmental values. Please direct any further questions or concerns to Mr. James W. Carter, Director.

Sincerely,



R.J. Firth  
Associate Director

lwp

cc: James W. Carter, Director  
Kevin Carter, Trust Lands Administration  
Bureau of Land Management, Utah State Office, Salt Lake City  
Bureau of Land Management, Escalante Resource Area Office

**VI. Private Entities**

10. UT951113-010

Union Pacific Railroad Company/Box Elder, Weber Counties: Little Mountain Junction - Little Mountain Line - Environmental Report. This is not the complete document; if additional information is needed please contact GOPB  
Comments due 12/4/95.

**VII. Short Turnaround**

**Please note! Due to the short turnaround please comment directly to the Agency with a copy to GOPB.**

State

11. UT951120-020

*Mike H.  
PUT*

Division of Oil, Gas & Mining/Kane County: Application for Permit to Drill - Proposal to drill a wildcat well the W-T State 2 No. 1-B, on state lease ML-45294 (Sec. 2, T40S, R7E). Comments due 11/28/95.

*Sensitive Area.  
New Hole in  
The Rock*

**VIII. Stream Alterations**

**Please note! Due to the short turnaround please comment directly to the Agency with a copy to GOPB.**

12. UT951108-010

Division of Water Rights/Salt Lake County: Willow Creek (No. 95-57-16SA) - Permit application to alter a natural stream channel (Sec. 28, T3S, R1E). Comments due 11/27/95.

13. UT951109-020

Division of Water Rights/Washington County: Mesquite Wash (No. 95-81-22SA) - Permit application to alter a natural stream channel (Sec. 6, T42S, R10W). Comments due 11/28/95.

**STATEMENTS OF BASIS**

**OGM Review of Application for Permit to Drill (APD)**

Company: Rangeland Petroleum Corp

Well Name: W - T STATE "2" 1-B

**ENGINEERING/LOCATING and SITING:**

The proposed location meets the location and siting requirements of R649-3-2. The application and proposed casing and drilling plan appear to be consistent with accepted industry standards of practice and sound engineering design. A casing design safety check is attached. Blow out prevention and monitoring/contingency plans are adequate.

Signature: F. R. Matthews

Date: 11/30/95

**GEOLOGY/GROUND WATER:**

Ground water may be encountered throughout the drilling of the well. Fresh water may be encountered in the Kayenta, Wingate and various other zones through the Redwall Limestone. The original well was drilled by Shell Oil in 1959. The casing program consisted of a 13 3/4" conductor casing set at 85 feet and cemented with 100 sacks of cement. A 10 3/4" surface casing was set at 1610 feet into the Kayenta Formation and cemented with 800 sacks of cement. The proposed casing program calls for a 7 5/8" casing to be set at 7200 feet in the Lynch Limestone and cemented in two stages to surface. A 4 1/2" production casing will be set at 10,500 feet and cemented back to 7000 feet. This casing and cement program will adequately protect any water encountered after drilling out from the existing casing. This program will also prevent communication between zones of different water quality.

Signature: Dan Jarvis

Date: 11-30-95

**SURFACE:**

An onsite review for this re-entry drilling project was conducted in accordance with DOGM Policy. At that time several possible plans for orientation of the drill rig and pits were discussed. Due to prevailing winds it was decided to orient the rig in a direction to place the reserve piton the NW corner of the drill pad. It was noted that this may possibly place the pits where they had been originally. The pit will be lined as discussed at the onsite, and a fence will be required to protect livestock.

Signature: K. Michael Hebertson

Date: 29 - Nov - 1995

**STIPULATIONS for APD Approval:**

**1. A plastic reinforced liner of a minimum 12 mil thickness with sufficient bedding  
Will be required**

**ATTACHMENTS:**

**1. Pictures were taken of the abandoned location.**

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

Site-Specific Factors	Ranking Score	Final Ranking Score
<b>Distance to Groundwater (feet)</b> >200 100 to 200 75 to 100 25 to 75 <25 or recharge area	0 5 10 15 20	0
<b>Distance to Surf. Water (feet)</b> >1000 300 to 1000 200 to 300 100 to 200 < 100	0 2 10 15 20	0
<b>Distance to Nearest Municipal Well (feet)</b> >5280 1320 to 5280 500 to 1320 <500	0 5 10 20	0
<b>Distance to Other Wells (feet)</b> >1320 300 to 1320 <300	0 10 20	0
<b>Native Soil Type</b> Low permeability Mod. permeability High permeability	0 10 20	10

<b>Fluid Type</b> Air/mist Fresh Water TDS >5000 and <10000 TDS >10000 or Oil Base Mud  Fluid containing Significant levels of hazardous constituents	0 5 10 15  20	10
<b>Drill Cuttings</b> Normal Rock Salt or detrimental	0 10	0
<b>Annual Precipitation (inches)</b> <10 10 to 20 >20	0 5 10	0
<b>Affected Populations</b> <10 10 to 30 30 to 50 >50	0 6 8 10	0
<b>Presence of Nearby Utility Conduits</b> Not Present Unknown Present	0 10 15	0

<b>Final Score</b>	20
--------------------	----

The summation of all of the above ranking scores will yield one value which shall be used to determine the appropriate type of containment, on a case-by-case basis. The sensitivity levels are as follows:

- Level I Sensitivity: For scores totaling  $\geq 20$
- Level II Sensitivity: For scores totaling 15 to 19
- Level III Sensitivity: For scores totaling  $< 15$

#### Containment Requirements According to Sensitivity Level

- Level I: Requires total containment by synthetic liner, concrete structure or other type of total containment structure or material.
- Level II: Bentonite or other compatible lining is discretionary depending on the fluid to be contained and environmental sensitivity.
- Level III: No specific lining requirements.

#### OTHER GUIDELINES FOR PITS

1. Unlined pits shall not be constructed on areas of fill materials.
2. A pit shall not be constructed in a drainages or floodplain of flowing or intermittent streams.
3. Synthetic liners used for lining reserve pits, shall be of 12 mil thickness or greater and shall be compatible with the fluid to be contained. Synthetic liners used for lining onsite pits with a longer expected life shall be a minimum of 30 mil thickness or as approved by the Division.
4. Synthetic liners shall be installed over smooth fill material which is free of pockets, loose rocks or other materials which could damage the liner.
5. Monitoring systems for pits or closed mud systems may be required for drilling in sensitive areas.

**STATE OF UTAH, DIV OF OIL, GAS & MINERALS**

<b>Operator: RANGELAND PETROLEUM CO</b>	<b>Well Name: W-T STATE 2 #1-B</b>
<b>Project ID: 43-025-11036</b>	<b>Location: SEC 2 - T40S - R7E</b>

Design Parameters:

Mud weight ( 7.14 ppg) : 0.371 psi/ft  
 Shut in surface pressure : 3069 psi  
 Internal gradient (burst) : 0.079 psi/ft  
 Annular gradient (burst) : 0.000 psi/ft  
 Tensile load is determined using air weight  
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1.60 (J)  
 Other : 1.50 (J)  
 Body Yield : 1.50 (B)

Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost		
1	3,500	4.500	11.60	J-55	LT&C	10,500	3.875		
	<b>Load (psi)</b>	<b>Collapse Strgth (psi)</b>	<b>S.F.</b>	<b>Burst Load (psi)</b>	<b>Min Int Strgth (psi)</b>	<b>Yield S.F.</b>	<b>Tension Load (kips)</b>	<b>Strgth (kips)</b>	<b>S.F.</b>
1	3895	4960	1.273	3895	5350	1.37	40.60	162	3.99 J

Prepared by : MATTHEWS, Salt Lake City, Utah  
 Date : 11-30-1995  
 Remarks :

Minimum segment length for the 10,500 foot well is 1,500 feet.  
 SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 147°F (Surface 74°F , BHT 221°F & temp. gradient 1.400°/100 ft.)  
 The liner string design has a specified top of 7,000 feet.  
 The burst load shown is the pressure at the bottom of the segment.  
 String type: Liner - Production  
 The mud gradient and bottom hole pressures (for burst) are 0.371 psi/ft and 3,895 psi, respectively.

**NOTE:** The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - collapse (with evacuated casing), 1.0 - (uniaxial) burst, 1.8 - API 8rd tension, 1.6 - buttress tension, 1.5 - body yield tension, and 1.6 - EUE 8rd tension. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.  
 Costs for this design are based on a 1987 pricing model. (Version 1.07)

**STATE OF UTAH, DIV OF OIL, GAS & MINERALS**

<b>Operator: RANGELAND PETROLEUM CO</b>	<b>Well Name: W-T STATE 2 #1-B</b>
<b>Project ID: 43-025-11036</b>	<b>Location: SEC 2 - T40S - R7E</b>

**Design Parameters:**

Mud weight ( 7.14 ppg) : 0.371 psi/ft  
 Shut in surface pressure : 3069 psi  
 Internal gradient (burst) : 0.079 psi/ft  
 Annular gradient (burst) : 0.000 psi/ft  
 Tensile load is determined using air weight  
 Service rating is "Sweet"

**Design Factors:**

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1.60 (J)  
 Other : 1.50 (J)  
 Body Yield : 1.50 (B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	400	7.625	29.70	WC70	LT&C	400	6.750	
2	4,400	7.625	26.40	WC70	LT&C	4,800	6.844	
3	600	7.625	26.40	WC50	ST&C	5,400	6.844	
4	1,800	7.625	29.70	WC50	LT&C	7,200	6.750	

	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)	Tension Strgth (kips)	S.F.
1	148	3132	9.999	3100	6300	2.03	197.34	373	1.89 J
2	1780	3036	1.706	3446	6300	1.83	185.46	432	2.33 J
3	2003	2641	1.319	3493	3800	1.09	69.30	289	4.17 J
4	2671	3690	1.382	3635	4300	1.18	53.46	373	6.98 J

Prepared by : MATTHEWS, Salt Lake City, Utah  
 Date : 11-30-1995  
 Remarks :

Minimum segment length for the 7,200 foot well is 1,500 feet.  
 SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 147°F (Surface 74°F , BHT 221°F & temp. gradient 1.400°/100 ft.)  
 String type: Intermediate - Prod

**NOTE:** The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - collapse (with evacuated casing), 1.0 - (uniaxial) burst, 1.8 - API 8rd tension, 1.6 - buttress tension, 1.5 - body yield tension, and 1.6 - EUE 8rd tension. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.  
 Costs for this design are based on a 1987 pricing model. (Version 1.07)



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

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

November 30, 1995

Rangeland Petroleum Corporation  
210 North Main Street  
Midland, Texas 79701

Re: W-T State "2" #1-B Well, 1988' FNL, 1983' FWL, SE NW, Sec. 2, T. 40. S.,  
R. 7 E., 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 43-025-11036.

Sincerely,

A handwritten signature in black ink, appearing to read "R. J. Firth".

R. J. Firth  
Associate Director

lwp

Enclosures

cc: Kane County Assessor  
Bureau of Land Management, Cedar City District Office  
School and Institutional Trust Lands Administration

WAPD



Operator: Rangeland Petroleum Corporation  
Well Name & Number: W-T State "2" #1-B  
API Number: 43-025-11036  
Lease: State ML-45294  
Location: SE NW Sec. 2 T. 40 S. R. 7 E.

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5340.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Frank Matthews or Mike Hebertson at (801)538-5340.

3. Reporting Requirements

All required reports, forms and submittals shall 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. On-site Pre-drill Evaluation and Review

Compliance with all requirements and stipulations developed during the onsite evaluation and review.



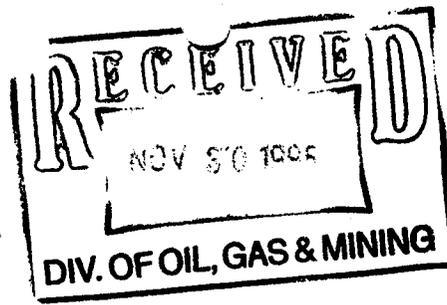
# State of Utah

*School and Institutional*  
TRUST LANDS ADMINISTRATION

Michael O. Leavitt  
Governor

David T. Terry  
Director

355 West North Temple  
3 Triad Center, Suite 400  
Salt Lake City, Utah 84180-1204  
801-538-5508  
801-355-0922 (Fax)



November 27, 1995

Mr. James Carter  
State of Utah, Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 300  
Salt Lake City, Utah 84101

Mr. A.J. Martinez  
Escalante Resource Area  
Bureau of Land Management  
Escalante, Utah 84726

Gentlemen:

The State of Utah School and Institutional Trust Lands Administration (the Trust Lands Administration) has received copies of certain letters to your offices from Mr. Ken Rait, Issues Director for the Southern Utah Wilderness Alliance (SUWA). The SUWA letters express concern regarding the Rangeland Petroleum Corp. W-T State "2" No. 1B well located in SE/4NW/4 Section 2, Township 40 South, Range 7 East, Kane County, Utah; and potential impacts of those operations on the scenic, wilderness and historic values of the area.

As you know, the operation is a proposed re-entry of an old wellbore located on trust lands. Our records indicate that Rangeland is a valid rights holder under Mineral Lease 45294, they have complied with all terms and conditions of the lease and the rules governing the management and use of school and institutional trust lands in Utah. Rangeland has every right afforded to them under the terms of the lease to commence the proposed operations. We find no reason to deny Rangeland their rights under the lease.

The Trust Lands Administration recognizes the unique charm and splendor of the Escalante canyon area, however, we also recognize that multiple use of trust land resources are desirable and achievable. We are "deeply concerned" about the nature of questions SUWA has asked the Division of Oil, Gas and Mining and the Bureau of Land Management to address. We believe that most of the questions raised by SUWA are adequately addressed in the on-site predrill evaluation and review and in Rangeland's application for permit to drill (APD). Other questions raised by SUWA have no bearing on approval of the APD or are outside the scope of your consideration for approval of the operations.



November 27, 1995

Page Two

The proposed well site is not on public lands, nor is Section 2 captured within a Wilderness Study Area. The site is easily accessed via a well established and maintained road across public lands managed by the Bureau of Land Management. Utah v. Andrus (486 F. Supp. 995 D. Utah 1979), commonly referred to as the Cotter decision, establishes the right of access to trust lands across public lands. We know you will consider these issues, in addition to many others, when you review and approve Rangeland's operations.

The Trust Lands Administration has confidence in the regulatory oversight responsibilities of the Division of Oil, Gas and Mining, and the Bureau of Land Management concerning this matter. We support the proposed re-entry operation, as a successful project will mean more royalty proceeds to help educate children in Utah. If you have any questions regarding the position of Trust Lands Administration in this issue, please contact me at (801) 538-5508.

Sincerely,  
SCHOOL AND INSTITUTIONAL TRUST LANDS ADMINISTRATION



James D. Cooper  
Mineral Resource Manager

cc: David T. Terry, Director  
School and Institutional Trust Lands Administration

Mr. Terry W. Michael, President  
Rangeland Petroleum Corporation

William Lamb, Utah State Director  
Bureau of Land Management

Mr. Ken Rait, Issues Director  
Southern Utah Wilderness Alliance

SODA UNIT

LEASE NAME

1

WELL NO.

1

TEST NO.

SHELL OIL COMPANY

LEASE OWNER

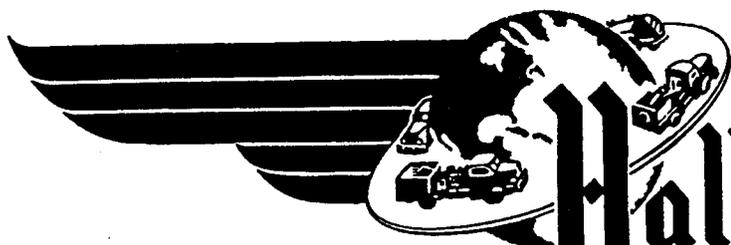
FARMINGTON

OWNERS DISTRICT

405-96

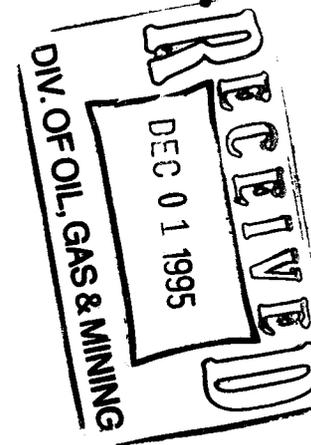
*P* **THE NEW.....**

*Formation Testing Service Report*



**Halliburton**

**OIL WELL CEMENTING CO.**



	Time	PSI	Ticket No. 189424  Lease SODA UNIT Well No. 1 Test No. 1 BT No. 812 Depth 6181' 12 Hr. Clock No. - Temperature Corrected to Calc. 130 ° F
Initial Hydro Mud Pressure		2860	
1st	Initial Flow	1816	
	Final Flow	30 Minutes 1869	
Initial Closed In Pressure	30 Minutes	2121	
2nd	Initial Flow	1900	
	Final Flow	120 Minutes 2129	
Final Closed In Pressure	60 Minutes	2131	
Final Hydro Mud Pressure		2797	

PRESSURE ↑

	1st Flow Pressure		Initial CIP		2nd Flow Pressure		Final CIP	
	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.
PO	.000	1816	.000	1869	.000	1900	.000	2129
P1	.020	1869	.0185	2107	.098	2062	.392	2131
P2			.037	2116	.196	2110		
P3			.0555	2119	.294	2119		
P4			.074	2121	.392	2124		
P5			.0925	2121	.490	2128		
P6			.111	2121	.588	2126		
P7			.1295	2121	.686	2122		
P8			.148	2121	.784	2129		
P9			.1665	2121				
P10			.185	2121				
		Minute Intervals	3	Minute Intervals	15	Minute Intervals		Minute Intervals

Remarks:

HOWCO 1297-R1-SANDEFER

181424 812

62681L #

Each Horizontal Line Equal to 1000 p.s.i.

	Time	PSI	Ticket No. 189424  Lease SODA UNIT  Well No. 1 Test No. 1  BT No. 814 Depth 6186'  12 Hr. Clock No. -  Temperature Corrected to Calc. 130 ° F
Initial Hydro Mud Pressure		2844	
1st	Initial Flow	1804	
	Final Flow	3 Minutes 1858	
Initial Closed In Pressure	30 Minutes	2104	
2nd	Initial Flow	1885	
	Final Flow	120 Minutes 2111	
Final Closed In Pressure	60 Minutes	2111	
Final Hydro Mud Pressure		2844	

PRESSURE ↑

	1st Flow Pressure		Initial CIP		2nd Flow Pressure		Final CIP	
	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.
PO	.000	1804	.000	1858	.000	1885	.000	2111
P1	.020	1858	.020	2087	.103	2046	.413	2111
P2			.040	2097	.206	2092		
P3			.060	2100	.309	2104		
P4			.080	2101	.412	2106		
P5			.100	2103	.515	2108		
P6			.120	2103	.618	2109		
P7			.140	2104	.721	2111		
P8			.160	2104	.824	2111		
P9			.180	2104				
P10			.200	2104				
	Minute Intervals		3	Minute Intervals	15	Minute Intervals	Minute Intervals	

Remarks:

Initial Closed In Time		Minutes		Date	1-14-60
Tool Open Flow Period		1st 3 / 2nd 120 Minutes		Ticket No.	189424
Final Closed In Time		60 Minutes		HOWCO DISTRICT	FARMINGTON
Depth Top Gauge		6176 Ft.	Blanked Off	Yes	Kind of Job
BT. P.R.D. No		256	12 Hr. Clock		
Pressure Readings		Field	Office Corrected		
Initial Hydro Mud Pressure		OPERATOR	KEPT THIS		
Initial Closed in Pres.		CHART	Elevation		
Initial Flow Pres.			Total Depth		
Final Flow Pres.			Casing or Hole Size		
Final Closed in Pres.			Liner or Rathole Size		
Final Hydro Mud Pressure			Casing Perforations		
Depth Center Gauge		6181 Ft.	Blanked Off		Yes
BT. P.R.D. No		812	12 Hr. Clock		
Pressure Readings		Field	Office Corrected		
Initial Hydro Mud Pressure		2878	2860		
Initial Closed in Pres.		2130	2121		
Initial Flow Pres.		1905	1816-1900		
Final Flow Pres.		2130	1869-2129		
Final Closed in Pres.		2130	2131		
Final Hydro Mud Pressure		2878	2797		
Depth Bottom Gauge		6186 Ft.	Blanked Off		Yes
BT. P.R.D. No		814	12 Hr. Clock		
Pressure Readings		Field	Office Corrected		
Initial Hydro Mud Pressure		2875	2844		
Initial Closed in Pres.		2090	2104		
Initial Flow Pres.		1900	1804-1885		
Final Flow Pres.		2090	1858-2111		
Final Closed in Pres.		2090	2111		
Final Hydro Mud Pressure		2875	2844		
Amount-Type of Cushion		None	Recovered		
			4900 Feet of Muddy Water		
			Recovered Feet of		
			Recovered Feet of		
			Recovered Feet of		
			MR. BOB NAZARIAN		
			MR. CHRIS CHRISTIANSON		
			Witnessed By		
			BOONE		
			Tester		

LOCATION Sec. 2-10S-7E  
 LEASE NAME  
 WELL NO. 1  
 FIELD  
 TEST NO. 1  
 COUNTY KANE  
 STATE UTAH  
 SODA UNIT  
 SHELL OIL COMPANY  
 LEASE OWNER  
 OWNERS DISTRICT

P. O. BOX 1468  
 MONAHANS, TEXAS 79756  
 PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA  
 MIDLAND, TEXAS 79701  
 PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. Terry W. Michael LABORATORY NO. 39599  
P. O. Box 232, Midland, TX 79702 SAMPLE RECEIVED 3-7-95  
 RESULTS REPORTED 3-20-95

COMPANY Rangeland Exploration Company LEASE Judd Hollow #1

FIELD OR POOL \_\_\_\_\_  
 SECTION \_\_\_\_\_ BLOCK \_\_\_\_\_ SURVEY \_\_\_\_\_ COUNTY Kane STATE Utah

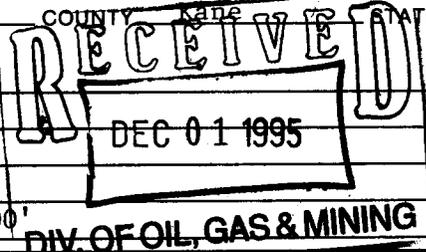
SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Tapeats water. 2-24-95

NO. 2 \_\_\_\_\_

NO. 3 \_\_\_\_\_

NO. 4 \_\_\_\_\_



REMARKS: 8,600'

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0706			
pH When Sampled				
pH When Received	6.28			
Bicarbonate as HCO <sub>3</sub>	146			
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	31.750			
Calcium as Ca	11.300			
Magnesium as Mg	850			
Sodium and/or Potassium	23,202			
Sulfate as SO <sub>4</sub>	922			
Chloride as Cl	57,525			
Iron as Fe	100			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	93,947			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen,				
Hydrogen Sulfide	0.0			
Resistivity, ohms/m at 77° F.	0.098			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By W. Reagan White  
 W. Reagan White, B. S.

P. O. BOX 1468  
MONAHANS, TEXAS 79756  
(915) 943-3234 or 563-1040

**Martin Water Laboratories, Inc.**

WATER CONSULTANTS SINCE 1953  
BACTERIAL AND CHEMICAL ANALYSES

709 W. INDIANA  
MIDLAND, TEXAS 79701  
(915) 683-4521

To: Mr. Terry W. Michael  
P. O. Box 232  
Midland, TX 79702

Laboratory No. 395100  
Sample received 3-7-95  
Results reported 3-20-95

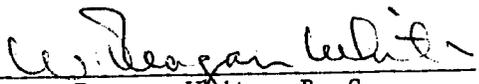
Company: Rangeland Exploration Co.  
County: Kane, Utah  
Field: 8,600'  
Lease: Judd Hollow #1

Subject: To determine the total petroleum hydrocarbon and BTEX content of submitted water sample described as "Tapeats water". Sample taken 2-24-95.

<u>PARAMETER</u>	<u>MG/L</u>
Total Petroleum Hydrocarbons	84.9
Benzene	<0.004
Toluene	<0.004
Ethylbenzene	<0.004
Xylenes	<0.004

Notation: Test methods in compliance with U.S.  
Environmental Protection Agency Regulations (SW-846;  
Third Edition; July, 1992).

Remarks: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

  
W. Reagan White, B. S.

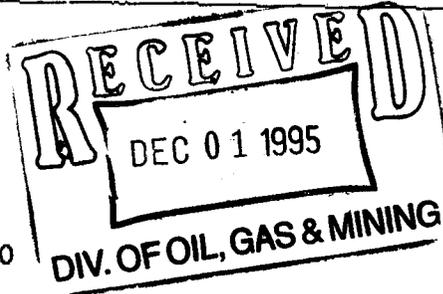
BHP "FEDERAL 28 #1"



## Core Laboratories

June 30, 1994

BHP Petroleum  
 1360 South Post Oak  
 Suite 1500  
 Houston, TX 77056-3020  
 Attn: Frank Huber



Sample ID:                      Sample # 4  
 Sample Date                    06/16/94  
 Laboratory ID No.              943325-1

	Mol %	WT %
Helium	0.67	0.06
Hydrogen	0.00	0.00
Oxygen	0.28	0.21
Nitrogen	6.41	4.21
Carbon Monoxide	0.00	0.00
Carbon Dioxide	92.57	95.49
Hydrogen Sulfide	0.00	0.00
Methane	0.08	0.03
Ethylene	0.00	0.00
Ethane	0.00	0.00
Propylene	0.00	0.00
Propane	0.00	0.00
Isobutane	0.00	0.00
Isobutylene	0.00	0.00
1-Butene	0.00	0.00
N-Butane	0.00	0.00
Trans 2 butene	0.00	0.00
Cis 2 butene	0.00	0.00
Isopentane	0.00	0.00
N-Pentane	0.00	0.00
Hexanes Plus	0.00	0.00
Total	100.00	100.00

Ideal Gas Gravity                      1.4731  
 Gross Heating Value                    0.8 BTU/cu ft ideal  
 Pressure Base                          14.696 psia

Laboratory Supervisor

Circle Cliffs analysis:

Isotope Analysis

	CO2	O2	
Sample #2	-3.95	-	USGS
Sample #3	-3.7, -3.8	-6.5, -6.0	Coastal Labs
Sample #4	-3.4, -3.4	-7.5, -7.4	Coastal Labs

Methane Isotope Analysis

	delta 13C	delta D
Sample #3	-18.94	-159

Other Isotope Ratios

Univ. of Rochester

Sample 4	He3/He4	0.32 X atmospheric ratio or 4.47x10-7
	Ar40/Ar36	>10,000
	Ni/Ar	190

Chemical Analysis

		USGS
Sample #2	CO2	94.09%
	N2	5.8%
	C3	0.1% (may not be propane)

	SPL	Global Geochemistry			
Sample #3	He	0.556	0.087	0.085	
	CO2	97.665	97.0	97.2	
	Ar/O2	0.044	0.12	0.12	
	Ni	1.710	2.30	2.16	
	C1	0.025	0.11	0.11	
	C2	--			
	CO	--			
	H2S	--			
	other	--	H2	.45	.44

	SPL	Core Lab	Un of Rochester	
Sample #4	He	0.639	0.67	.6300
	CO2	97.698	92.57	97.7
	Ar/O2	0.023	0.28	.028 ar
				<10ppm O2
	Ni	1.584	6.41	
	C1	0.056	0.08	
	C2	--	--	
	C3	--	--	
	C4	--	--	
	CO	--	--	

H2S -- --  
 other -- -- <10ppm Neon

gas gravity 1.4731

@ 1851 opened through choke, @ 1910 gas to surface, @ 1940 first sample taken through manifold (this sample was never used), @1945 second and third samples were taken and needle valves started freezing off. The sampler chamber was opened down hole and was recovered at 3AM. This last down hole sample was the fourth sample.

SPL used TCD G.C. analysis

Geochron Laboratories/Krueger Enterprises, Inc.

40'Ar/40K=.02579 Age=397+/-8 million years

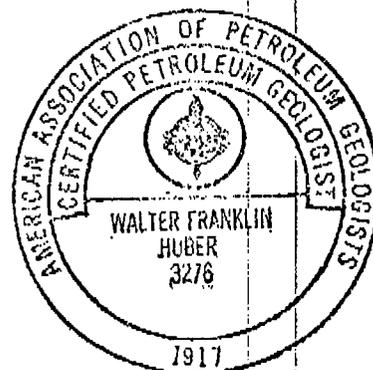
Argon Analysis:

40'Ar, ppm	40'Ar/Total 40Ar	Ave. 40Ar, ppm
.05652	.789	.05648
.05645		

Potassium Analyses:

%K	Ave. %K	40K, ppm
1.861	1.836	2.190
1.811		

40'Ar refers to radiogenic argon.

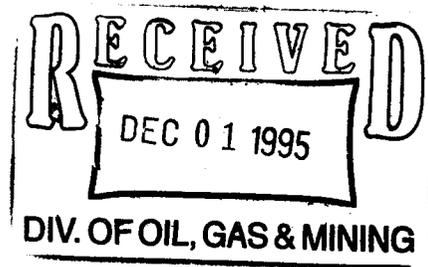


*W. Frank Huber*

**RANGELAND PETROLEUM**  
CORPORATION

November 22, 1995

Mr. Mike Hebertson  
Utah Division of Oil, Gas and Mining  
350 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203



Re: W-T State "2" No. 1B

Dear Mr. Hebertson:

Rangeland Petroleum Corporation respectfully requests an exemption to Utah state regulation R649-3-12 (Drilling Practices For Hydrogen Sulfide Areas And Formations) for the referenced well. Our well record research indicates is no threat of H<sub>2</sub>S exposure in any of the horizons the well will penetrate.

The wellbore to be utilized in this re-entry/deepening (Shell's Soda Unit No. 1) has penetrated all horizons down thru the Devonian without any indications of H<sub>2</sub>S. The hydrocarbons originally trapped in the penetrated horizons have apparently been displaced and replaced with surface (fresh) water. A drillstem test taken from 6142' to 7155' shows that the Mississippian, Devonian and Upper Cambrian reservoirs contain only fresh water with a maximum salinity of 2500 ppm. Rangeland will deepen this wellbore, after running 7-5/8" casing to 7200', to a new depth of 10,500'. The targeted horizon is the Tapeats Sand at approximately 8600 feet. Analysis of Tapeats fluid samples from nearby reservoirs showed zero (0.0) ppm H<sub>2</sub>S. Rangeland has not been able to find any evidence of H<sub>2</sub>S in any of the numerous Cambrian penetrations drilled in either the Arizona or Utah portion of the Kaiparowits Basin. The well will be TD'd in Precambrian Upper Chuar Shale. Sediment samples from Chuar Shale outcrops have been studied extensively by the USGS in Denver and found to have a very low sulfur content and thus unlikely to generate H<sub>2</sub>S. The absence of H<sub>2</sub>S in the Tapeats, which is believed to be sourced by the Chuar Shale, further supports the absence of H<sub>2</sub>S in the Chuar Shales.

Rangeland offers the following information for your consideration of this request:

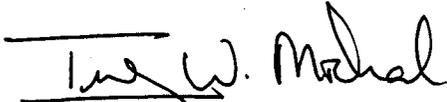
1. Tapeats (lower Cambrian) water analysis from Rangeland's "Judd Hollow No. 1" drilled in February 1995 which shows zero H<sub>2</sub>S content. The Judd Hollow No. 1 is located in Section 19, Township 43 South, Range 2 East.
2. Tapeats gas analysis from BHP's Federal "28" No. 1 drilled in June 1994 which shows zero H<sub>2</sub>S content. The Federal "28" No. 1 is located in Section 28, Township 33 South, Range 7 East.

Page 2

3. Drilling record, mud log and drill stem test report for the Shell Soda Unit No. 1 located in Section 2, Township 40 South, Range 7 East.

Should you have any questions or if I can provide any further information, please contact me at 915/686-8983.

Sincerely,

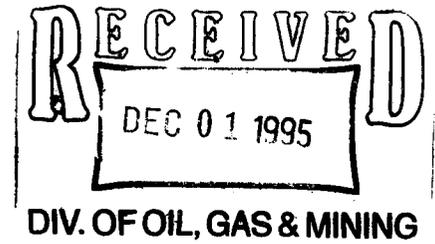
A handwritten signature in black ink that reads "Terry W. Michael". The signature is written in a cursive style with a horizontal line above the first name.

Terry W. Michael  
President

**RANGELAND PETROLEUM**  
CORPORATION

November 21, 1995

Mr. R.J. Firth  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203



Re: W-T State "2" No. 1B  
Kane County, Utah

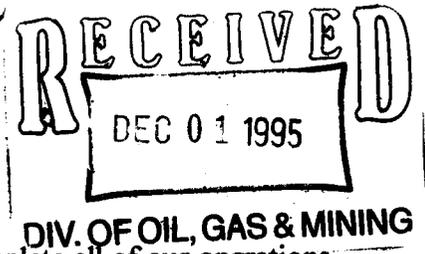
Dear Mr. Firth:

I have received a copy of Mr. Ken Rait's letter of 11/16/95 in which he expresses his concern regarding the potential impact on the scenic value caused by drilling operations for the referenced well. I assume Mr. Rait is aware that a majority of the points he raises are well regulated by your office and are addressed in the A.P.D. He also should be aware of the fact that a number of wells have been drilled in this area over the past several decades, none of which have diminished the beauty and splendor of southern Utah.

Rangeland's operation will have even less an impact than those wells previously drilled. Rangeland will reenter Shell's abandoned "Soda Unit No. 1" wellbore and deepen the well from its current TD of 7155' to a depth of 10,500'. Existing roads will be used for rig access. Surface disturbance will be minimized by utilizing the old drilling pad. As your office is already aware, impact on the botanical and wildlife resources is essentially nil. The well will be drilled with air and/or air-mist as long as possible so a minimum of additives will be used in the drilling fluids. If it becomes necessary to drill with mud, a fresh water mud will be used which will consist primarily of fresh water and bentonite (clay). The composition of the materials remaining in the reserve pit after completion of drilling operations will probably be a combination of limestone, sandstone and shale drill cuttings, fresh water, bentonite gel (clay), and lost circulation material (cedar fiber, etc.). The reserve pits will be backfilled after the pits have dried. The pit area will be restored as near as possible to the original contours of the land and reseeded with native grasses and shrubs. Bruce Bonebreak, regional habitat manager for the Utah Division of Wildlife Resources, attended our first onsite thought the seed mix was fine. The drilling pad will also be reclaimed in the same manner upon abandonment of the well. Should Rangeland be successful in finding commercial hydrocarbons, the oil will initially be transported by truck and later, if economically feasible, by pipeline.

A significant oil discovery would bring immense economic benefit to the region and generate substantial revenue to local and state governments. Rangeland believes that this scenario is Mr. Rait and SUWA's biggest fear.

Page 2



Mr. Firth, I want to assure you that it is our sincere intent to complete all of our operations in a safe, prudent and an efficient manner. Rangeland will strive, as always, to minimize any impact of our operations on the wildlife, flora, and aesthetic values of the area.

Sincerely,

A handwritten signature in cursive script that reads "Terry W. Michael". A horizontal line is drawn above the signature.

Terry W. Michael  
President



# State of Utah

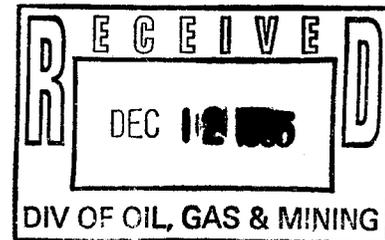
Department of Community & Economic Development  
Division of State History  
Utah State Historical Society



Michael O. Leavitt  
Governor  
Max J. Evans  
Director

300 Rio Grande  
Salt Lake City, Utah 84101-1182  
(801) 533-3500 • FAX: 533-3503 • TDD: 533-3502  
cehistory.ushs@email.state.ut.us

December 8, 1995



Kenneth L. Wintch, Archaeologist  
State Trust Lands  
355 West North Temple  
3 Triad Center, Suite 400  
Salt Lake City, Utah 84180-1204

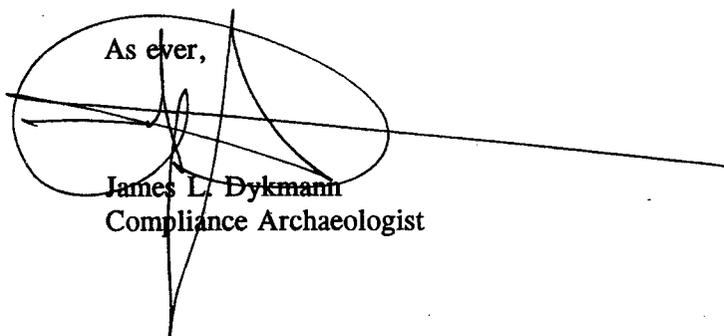
RE: Rangeland Petroleum Corporation Well Location U-95-CH-665

In Reply Please Refer to Case No. 95-1536

Dear Kenny:

The Utah State Historic Preservation Office received the above referenced proposal on November 27, 1995. Kenny, I recommend a determination of No Effect, however I have not received a final report for this project, the only report I have is a faxed copy from Mr. Wood, please provide me with a clean final copy of the report for our files.

This information is provided on request to assist Trust Lands Administration with its state law responsibilities as specified in U.A.C. 9-8-404. If you have questions, please contact me at (801) 533-3555. My computer address on internet is: [jdykman@email.state.ut.us](mailto:jdykman@email.state.ut.us)

As ever,  
  
James L. Dykman  
Compliance Archaeologist

JLD:95-1536 Lands

- c: Brian Wood, Permits West, 17 Verano Loop, Santa Fe, New Mexico 87503
- c: Mike Herbertson, Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, UT 84180-1203

JAN 8 1996

DIV OF OIL, GAS & MINING

5. Lease Designation and Serial Number: **ML-45294**

6. Indian, Allottee or Tribe Name: **N/A**

7. Unit Agreement Name: **N/A**

8. Well Name and Number: **W-T STATE "2" 1-B**

9. API Well Number: **43-025-11036**

10. Field and Pool, or Wildcat: **WILDCAT**

County: **KANE**

State: **UTAH**

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

**CONFIDENTIAL**

1. Type of Well: OIL  GAS  OTHER: \_\_\_\_\_

2. Name of Operator: **RANGELAND PETROLEUM CORPORATION**

3. Address and Telephone Number: **210 NORTH MAIN ST., MIDLAND, TX. 79701 (915) 686-8983**

4. Location of Well

Footages: **1988' FNL & 1983' FWL**

OQ, Sec., T., R., M.: **SENW 2-40S-7E**

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

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

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Multiple Completion
- Other **CHANGE INTERMEDIATE CEMENT**
- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Approximate date work will start 1-15-96

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

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other \_\_\_\_\_
- New Construction
- Pull or Alter Casing
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

\* Must be accompanied by a cement verification report.

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

Stage 1 Lead will be  $\approx$ 180 sx Hi-Lift with 12% D-20 (gel), 1% D-79 (sodium metasilicate), 0.75% D-112 (fluid loss), 3% D-44 (salt), 0.2% D-46 (defoamer), 0.25#/sk D-29 (cello-flake), and 2% ground rubber for 11.0 ppg and 3.58 yield. Tail will be  $\approx$ 100 sx Class G with 0.25#/sk D-29 and 2% CaCl for 15.8 ppg and 1.15 yield.

Stage 2 Lead will be  $\approx$ 120 sx Hi-Lift cement with same slurry and additives as Stage 1 Lead. Tail will be  $\approx$ 50 sx Class G with same slurry and additives as Stage 1 Tail.

This replaces Sundry dated 12-21-95.

13. Name & Signature: Brian Wood (505) 466-8120 Title: CONSULTANT Date: 1-5-96

(This space for State use only)

# RANGELAND PETROLEUM

CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

**FAX TRANSMISSION**

Page#: 1 of 2

<b>To:</b>		<b>DATE AND TIME OF TRANSMISSION</b>
<b>NAME</b>	Mr. Frank Matthews	January, 1996
<b>COMPANY</b>	State of Utah-Division of Oil, Gas & Mining	<b>FAX NUMBER</b>
		801/ 359-3940
<b>From:</b>		
<b>NAME</b>	----- Rangeland Petroleum Corp. -----	
<b>SUBJECT</b>	Daily Report for W-T State "2" No. 1B, Kane Co., Utah	
<b>Message:</b>		
Please find attached the daily drilling progress report for the subject well.		
Thank You.		
Mike Daniel		

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

**CONFIDENTIAL**

## RANGELAND PETROLEUM

CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

### **W-T STATE "2" #1B**

1988' FNL X 1983' FWL, Section 2,  
Township 40S, Range 7E, Kane County, Utah  
API#: 43-025-11036  
Lease: State ML-45294

### **DAILY PROGRESS REPORT**

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am on report day.

- 12/12/95**    **REMARKS:** Arrive on location & dig-out cellar & remove old Shell Soda Unit marker. Cut-off & dress 10 3/4" OD casing & weld-on crossover collar & 10' x 10 3/4" casing extension. Well showing slight gas blow to surface.
- 12/13/95**    **REMARKS:** Cement crossover collar & extension in ground using Redi-Mix cement & Dump 10 gal cement in casing to kill gas flow. WOC overnight.
- 12/14/95**    **REMARKS:** Cut-off 10 3/4" OD extension & weld-on wellhead & baseplate assembly at ground level. Test wellhead to 5000 psi & OK. Cement baseplate & extension in place using Redi-Mix cement & bolt blind flange onto wellhead. Notify dirt contractor to begin location construction.  
To-Date Cum. Cost: **\$20,254**
- 12/19/95**    **REMARKS:** Begin dirtwork for location construction & reserve pits.
- 12/23/95**    **REMARKS:** Complete pits & location construction. Waiting on dirt contractor to begin



JAN 23 1996

### SUNDRY NOTICES AND REPORTS ON WELLS

5. Lease Designation and Serial Number:	ML-45294
6. If Indian, Allottee or Tribe Name:	N/A
7. Unit Agreement Name:	N/A
8. Well Name and Number:	W-T STATE "2" 1-B
9. API Well Number:	43-025-11036
10. Field and Pool, or Wildcat:	WILDCAT

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

1. Type of Well: OIL  GAS  OTHER: \_\_\_\_\_

2. Name of Operator:  
RANGELAND PETROLEUM CORPORATION

3. Address and Telephone Number:  
210 NORTH MAIN ST., MIDLAND, TX. 79701 (915) 686-8983

4. Location of Well  
Footages: 1988' FNL & 1983' FWL  
CO, Sec., T., R., M.: SENW 2-40S-7E

County: KANE  
State: UTAH

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

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

Abandonment  
 Casing Repair  
 Change of Plans  
 Conversion to Injection  
 Fracture Treat  
 Multiple Completion  
 Other CHANGE INTERMEDIATE CEMENT

New Construction  
 Pull or Alter Casing  
 Recompletion  
 Shoot or Acidize  
 Vent or Flare  
 Water Shut-Off

Approximate date work will start 1-15-96

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

Abandonment \*  
 Casing Repair  
 Change of Plans  
 Conversion to Injection  
 Fracture Treat  
 Other \_\_\_\_\_

New Construction  
 Pull or Alter Casing  
 Shoot or Acidize  
 Vent or Flare  
 Water Shut-Off

Date of work completion \_\_\_\_\_

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

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

Stage 1 Lead will be  $\approx$ 180 sx Hi-Lift with 12% D-20 (gel), 1% D-79 (sodium metasilicate), 0.75% D-112 (fluid loss), 3% D-44 (salt), 0.2% D-46 (defoamer), 0.25#/sk D-29 (cello-flake), and 2% ground rubber for 11.0 ppg and 3.58 yield. Tail will be  $\approx$ 100 sx Class G with 0.25#/sk D-29 and 2% CaCl for 15.8 ppg and 1.15 yield.

Stage 2 Lead will be  $\approx$ 120 sx Hi-Lift cement with same slurry and additives as Stage 1 Lead. Tail will be  $\approx$ 50 sx Class G with same slurry and additives as Stage 1 Tail.

This replaces Sundry dated 12-21-95.

13. Name & Signature: Brian Wood (505) 466-8120 Title: CONSULTANT Date: 1-5-96

BRIAN WOOD

(This space for State use only)

[Signature] Petroleum Engineer 1/23/96

**CONFIDENTIAL**

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: RANGELAND PETROLEUM CORP.

Well Name: WT-2 # 1B (RE-ENTRY)

Api No. 43-025-11036

Section 2 Township 40S Range 7E County KANE

Drilling Contractor EXETER

Rig # 3

SPUDDED: Date 1/24/96

Time \_\_\_\_\_

How ROTARY

Drilling will commence \_\_\_\_\_

Reported by ROBERT DODSON

Telephone # 1-801-689-0498

Date: 1/23/96 Signed: JLT

# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

<b>To:</b>		DATE AND TIME OF TRANSMISSION
NAME	Mr. Frank Matthews	January, 1996
COMPANY	State of Utah-Division of Oil, Gas & Mining	FAX NUMBER
		801/ 359-3940
<b>From:</b>		
NAME	Rangeland Petroleum Corp. ----	
SUBJECT	Daily Report for W-T State "2" No. 1B, Kane Co., Utah	
<b>Message:</b>		
Please find attached the daily drilling progress report for the subject well.		
Thank You.		
Mike Daniel		

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

# RANGELAND PETROLEUM CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

### W-T STATE "2" #1B

1988' FNL X 1983' FWL, Section 2,  
Township 40S, Range 7E, Kane County, Utah

API#: 43-025-11036

Lease: State ML-45294

### DAILY PROGRESS REPORT

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am on report day.

**01/19/96**    **REMARKS:** Finished filling inside reserve pit. Set up camp trailers with fresh water and septic tanks. Delivered 7350' 7-5/8" casing to location. Continued moving in rig.  
**01/22/96**

Daily Cost: \$80,100      Cum. Cost: \$126,578

**01/23/96**    **REMARKS:** Finish MIRU Excter Rig #3. Set and Connect propane & power supply. Prep to Spud.  
Daily Cost: \$1,985      Cum. Cost: \$128,50

**01/24/96**    **(Day 01)**  
TD: 593' ; Progress:593'; Present Oper: RIII W/ DP; Form.:  
Bit#1:9" OD Smith SD-64 Jets 0/18/20; WOB: 0-5 ;RPM: 30-50; ROP:: Hrs on Bit: :  
BHA: Bit, Float, 9-6 5/8"Drill Collars; MW: AIR/MIST/FOAM; Visc:: pH:: Pump#1::  
Hourly Summary: 1.0 -RU BOP. Choke, Choke lines, 11.0- MU Bit Assembly X RIH  
Y Del Cmt 80' 310' X Continue to RII DP & RII

TD: 593' ; Progress:593'; Present Oper: RIII W/ DP; Form.:  
Bit#1:9" OD Smith SD-64 Jets 0/18/20; WOB: 0-5 ;R/ 30-50; ROP:: Hrs on Bit: ;  
BHA: Bit, Float, 9-6 5/8" Drill Collars; MW: AIR/MIST, OAM: Visc:: pH:: Pump#1::  
Hourly Summary: 1.0 -RU BOP, Choke, Choke lines, 11.0- MU Bit Assembly X RIH  
X Drl Cmt 80'-319' X Continue to PU DP x RIH

REMARKS: Rig went on daywork at 8 p.m. 1/23/96. Next reported cmt plug @1500'

Daily Cost: \$107,469

Cum. Cost: \$ 236,032

01/25/96

(Day 02)

TD: 2447'; Progress: 1854'; Present Oper: DRLG OH; Form.: Sandstone;  
Bit#1:9" OD Smith SD-64 Jets 0/18/20; WOB: 0-25; RPM: 40-50; ROP:: Hrs on Bit:33;  
BHA: Bit, Bit Sub w/ float, 9-6.5" DC, 9-HW DC (550') MW:: Pump#1: AIR @ 1900SCFM;  
Press: 175#.

Hourly Summary: 22.0-Wash X Ream Tag Cmt @ 1362', Drl hard cmt to 1610'. Wash  
X Ream OH to 2447'. 1.0- Repair flowline/Swing line, 1.0--Test Annular to 1000 psi @  
1362'.

REMARKS: Slower Reaming in OH @ 30-60'/Hr., Increased water in hole.

Daily Cost: \$9,156

Cum. Cost: \$245,188

01/26/96

(Day 03)

TD: 4948'; Progress: 2501'; Present Oper: Wash X Ream; Form.: Sandstone;  
Bit#1:9" OD Smith SD-64 Jets 0/18/20; WOB: 0-20; RPM: 60; ROP:113'; Hrs on Bit:55;  
BHA: Bit, Bit Sub w/ float, 9-6.5" DC, 9-HW DC (550') MW: 6 Air-High pressure  
475CFM@550#; Visc: 30; Pump#1: 6x16, SPM:55; BPM:8.25; Press.550#.

Hourly Summary: 22.0- Cont. Wash X Ream, Switch over to aerated water @ 2696'  
(Hit full column of water @ 2540') and circ. out LCM. 1.5- RU gasbuster for aerated  
water and refill with produced water (400 chlorides and 80 ppm hardness, .5- Test  
Popoff line on main pump.

REMARKS: LCM is saw dust

Daily Cost: \$7,742

Cum. Cost: \$252,930

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# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

To:

NAME <b>Mr. Frank Matthews</b>	DATE AND TIME OF TRANSMISSION <b>January, 1996</b>
COMPANY <b>State of Utah-Division of Oil, Gas &amp; Mining</b>	FAX NUMBER <b>801 / 359-3940</b>

From:

NAME <b>----- Rangeland Petroleum Corp. -----</b>
--

SUBJECT

<b>Daily Report for W-T State "2" No. 1B, Kane Co., Utah</b>
--

Message:

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

# RANGELAND PETROLEUM CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

### W-T STATE "2" #1B

**1988' FNL X 1983' FWL, Section 2,  
Township 40S, Range 7E, Kane Co, Utah**

### DAILY PROGRESS REPORT

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**01/27/96**

**(Day 04)**

TD:6342' ; Progress: 1394' ; Present Oper: REAMING; Form.: SS/ DOLO;  
 Bit#1: 9" OD Smith SD-64 Jets 0/18/20; WOB: 0-10; RPM:50-60; ROP: 72.4'/hr;  
 Hrs on Bit: 74.25 BHA: Bit, Bit Sub w/float, 9-6.5"DC, 9-HW DC (550); MW: 6.-8.5;  
 Pump#1: 6 x16, SPM: 55-65;BPM: 8.25; Press: 650-950;  
 Hourly Summary: **19.25**-Wash X Ream, Drill Cmt @ 4948'-5056', Cont. to wash X ream to 6311'. Hole packing off X pump sweeps, **3.75**- Circ @ 6311'. Hole tight X packing off, Lay down one single X pump sweep. Hole unloaded w/ large volume cuttings., **1.0**- Rig service, Change rotating head rubber.  
**REMARKS:** Started mud up @ 7 a.m. w/ vis @ 35-40 and 10-15 WL.  
*Daily Cost: \$8,882      Curr. Cost: \$261,812*

**1/28/96**

**(Day 05)**

TD:7144' ; Progress: 802' ; Present Oper: RIH; Form.:  
 Bit#1: 9" OD Smith SD-64 Jets 0/18/20; WOB: 0-10; RPM:60; ROP: 94'/hr;  
 Hrs on Bit: 74.25 Bit#2: 9" Atlas GT 1 Jets 20; WOB:; RPM:;BHA: Bit, Bit Sub ,  
 12-6 1/4 DC, 9- HWDP ; MW: 8.2; Visc: 40; PV: 6; YP:8; PH: 9.5;

(Page 00)  
TD:7144' ; Progress: 802' ; Present Oper: RIH; Form::  
Bit#1: 9" OD S... SD-64 Jets 0/18/20; WOB: 0-10; RPM: 0; ROP: 94'/hr;  
Hrs on Bit: 74.25 - Bit#2: 9" Atlas GT 1 Jets 20; WOB:: RPM::BHA: Bit, Bit Sub ,  
12-6 1/4 DC, 9- HWDP ; MW: 8.2; Visc: 40; PV: 6; YP:8; PH: 9.5;  
Pump#1: 6 x16, SPM: 66;BPM: 9.9; Press: ; Hourly Summary: 8.5-Wash X Ream 6342'-  
7144' 1.0- Circ. prior to survey -1/2 hr., Circ prior to trip-1/2 hr. 2.5- Run WL survey  
misrun, repeat survey. Over 6 degrees, rerun w/12 degree pin. Survey @ 7 1/4 deg. 7.5-  
Trip for new bit X strap pipe out of hole TD@7144'. 4.5-RIH w/ bit #2 X hit tight spot @  
2633'. Wash X Ream all tight spots.  
REMARKS: Survey 7 1/4 degrees @ 7144'.  
Daily Cost: \$15,455 Cum. Cost: \$277,267

1/29/96

**(Day 06)**

TD:1827' ; Progress: 312' ; Present Oper: Open Hole to 9 1/2"; Form::  
Bit#2: 9" Atlas GT 1 Jets ; WOB:0-20; RPM:50-60; Bit#3: 9 1/2" Hughes J-33  
Jets 24/24/0 ; WOB 5-12; RPM: 50-60; ROP: 96'/hr; BHA: Bit, Bit Sub w/ float, 12-6  
1/4"DC, 9- HWDP ; MW: Aerated Water; Pump#1: 6 x16, SPM: 55;BPM: 8.25;  
Press:400#; Hourly Summary: 5.5-RIH w/ Bit #2 Wash X Ream all tight  
spots. Lost circ @ 5560'. Work pipe X attempt to establish circ. , no success. Pumped  
away 500 bbls mud. 2.5- POH to check bit. Bit gauged @ 8 3/4". Found all bits to be 8  
3/4". 11.5-RIH w/ DP . POH X lay down drill pipe. RIH w/ 9 1/2" bit to 1515'.1.25-  
Change out rotating head rubber. 3.5-Wash to casing shoe, opening hole to 9 1/2" to  
1827'.  
REMARKS: Surveys: none.  
Daily Cost: \$11,742 Cum. Cost: \$289,009

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# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
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 PHONE #: (915) 686-8983  
 FAX #: (915) 686-7911

✓ JAW  
 ✓ DR  
 ✓ DRE  
 File

**FAX TRANSMISSION** Page#: 1 of 2

<b>To:</b>	<table border="1" style="width: 100%;"> <tr> <td style="width: 5%;"><small>NAME</small></td> <td>Mr. Frank Matthews</td> <td style="width: 5%;"><small>DATE AND TIME OF TRANSMISSION</small></td> <td>January, 1996</td> </tr> <tr> <td><small>COMPANY</small></td> <td>State of Utah-Division of Oil, Gas &amp; Mining</td> <td><small>FAX NUMBER</small></td> <td>801/ 359-3940</td> </tr> </table>	<small>NAME</small>	Mr. Frank Matthews	<small>DATE AND TIME OF TRANSMISSION</small>	January, 1996	<small>COMPANY</small>	State of Utah-Division of Oil, Gas & Mining	<small>FAX NUMBER</small>	801/ 359-3940	
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<small>NAME</small>	----- Rangeland Petroleum Corp. -----									
<b>Subject:</b>	<table border="1" style="width: 100%;"> <tr> <td><small>SUBJECT</small></td> <td>Daily Report for W-T State "2" No. 1B, Kane Co., Utah</td> </tr> </table>		<small>SUBJECT</small>	Daily Report for W-T State "2" No. 1B, Kane Co., Utah						
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<b>Message:</b>	<div style="border: 1px solid black; padding: 10px;"> <p>Please find attached the daily drilling progress report for the subject well.</p> <p style="text-align: center;">Thank You.</p> <p style="text-align: right;"><i>Mike Daniel</i></p> </div>									

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## RANGELAND PETROLEUM CORPORATION TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

**W-T STATE "2" #1B**  
**1988' FNL X 1983' FWL, Section 2,**  
**Township 40S, Range 7E, Kane Co, Utah**

### **DAILY PROGRESS REPORT**

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**1/30/96 (Day 07)**  
 TD: 3380'; Progress: 1556' ; Present Oper: Open Hole to 9 1/2"; Form::  
 Bit#3: 91/2" Hughes J-33 Jets 24/24/0 ; WOB 5-8; RPM: 50-60; ROP: 65'/hr;  
 BHA: Bit, Bit Sub w/ float, 12- 6 1/4"DC, 9- HWDP ; MW: 8.4; Visc: 34; ph: 9.0;  
 Pump#1: 6 x16, SPM: 66;BPM: 9.9 ;Press: 550#; Hourly Summary: **23.5**-Continue to open hole. Hard drilling @ 2669'-2701'. Started hard drilling @ 3287'. ROP 1 to 1.5 hrs. per joint, Pump sweeps. .25-Service rig.  
**REMARKS:** Surveys: none.  
Daily Cost: \$11,640      Curr. Cost: \$300,649

**1/31/96 (Day 08)**  
 TD: 6072'; Progress: 2692' ; Present Oper: Reaming Hole to 9 1/2"; Form:: ROP: 125'/hr;  
 Bit#3: 91/2" Hughes J-33 Jets 24/24/0 ; WOB 5-10; RPM: 50; Hrs. on bit: 48.5;BHA:  
 Bit, Bit Sub w/ float, 12- 6 1/4"DC, 9- HWDP ; MW: 8.2-9.0; Visc: 35; ph: 8.5; Pump#1: 6 x16, SPM: 66; BPM: 9.9 ; Press: 800#; Hourly Summary: **2.25**-Circulate and condition hole. Pump high viscous sweeps periodically. Pumping out large volume of cuttings with each sweep. Circulating out rubber pieces. Pit volume steady. .25- Service rig. **21.5**- Continue to ream open hole with 9 1/2" bit to 6072'.  
**REMARKS:** Surveys: none.

...  
hole. Pump high viscous sweeps periodically. Pumping out large volume of cuttings with  
each sweep. Circulating out rubber pieces. Pit volume survey. .25- Service rig. 21.5-  
Continue to ream open hole with 9 1/2" bit to 6072'.

**REMARKS:** Surveys: none.

*Daily Cost: \$9,602*

*Cum. Cost: \$310,251*

**210 N. Main St. • Midland, Texas 79701 • (915) 686-8983 • Fax (915) 686-7911**

# RANGELAND PETROLEUM CORPORATION

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PHONE #: (915) 686-8983  
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## FAX TRANSMISSION

Page#: 1 of 2

To:

NAME <b>Mr. Frank Matthews</b>	DATE AND TIME OF TRANSMISSION <b>January, 1996</b>
COMPANY <b>State of Utah-Division of Oil, Gas &amp; Mining</b>	FAX NUMBER <b>801 / 359-3940</b>

*Conf.*

From:

NAME <b>----- Rangeland Petroleum Corp. -----</b>
SUBJECT <b>Daily Report for W-T State "2" No. 1B, Kane Co., Utah</b>



Message:

Please find attached the daily drilling progress report for the subject well.

Thank You.

**Mike Daniel**

*✓ JDM  
DRT  
File*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

# RANGELAND PETROLEUM CORPORATION FIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

**W-T STATE "2" #1B**  
**1988' FNL X 1983' FWL, Section 2,**  
**Township 40S, Range 7E, Kane Co, Utah**

### DAILY PROGRESS REPORT

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**1/30/96 (Day 07)**

TD: 3380'; Progress: 1556' ; Present Oper: Open Hole to 9 1/2"; Form::  
Bit#3: 91/2" Hughes J-33 Jets 24/24/0 ; WOB 5-8; RPM: 50-60; ROP: 65'/hr;  
BHA: Bit, Bit Sub w/ float, 12- 6 1/4"DC, 9- HWDP ; MW: 8.4; Visc: 34; ph: 9.0;  
Pump#1: 6 x16, SPM: 66; BPM: 9.9 ; Press: 550#; Hourly Summary: **23.5**-Continue to open hole. Hard drilling @ 2669'-2701'. Started hard drilling @ 3287'. ROP 1 to 1.5 hrs. per joint, Pump sweeps. .25-Service rig.

**REMARKS:** Surveys: none.

**Daily Cost: \$11,640**

**Cum. Cost: \$300,649**

**1/31/96 (Day 08)**

TD: 6072'; Progress: 2692' ; Present Oper: Reaming Hole to 9 1/2"; Form:: ROP: 125'/hr;  
Bit#3: 91/2" Hughes J-33 Jets 24/24/0 ; WOB 5-10; RPM: 50; Hrs. on bit: 48.5; BHA:  
Bit, Bit Sub w/ float, 12- 6 1/4"DC, 9- HWDP ; MW: 8.2-9.0; Visc: 35; ph: 8.5; Pump#1: 6 x16, SPM: 66; BPM: 9.9 ; Press: 800#; Hourly Summary: **2.25**-Circulate and condition hole. Pump high viscous sweeps periodically. Pumping out large volume of cuttings with each sweep. Circulating out rubber pieces. Pit volume steady. .25- Service rig. **21.5**- Continue to ream open hole with 9 1/2" bit to 6072'.

**REMARKS:** Surveys: none.

**Daily Cost: \$9,602**

**Cum. Cost: \$310,251**

each sweep. Circulating out rubber pieces. Pit volume steady. .25- Service rig. 21.5- Continue to ream open hole with 9 1/2" bit to 6072'.

REMARKS: Surveys: none.

Daily Cost: \$9,602

Cum. Cost: \$310,251

2/01/96

(Day 09)

TD: 7168'; Progress: 1096' ; Present Oper: RIH w/ magnet; Form:: ROP: 105'/hr; Bit#3: 9 1/2" Hughes J-33 Jets 24/24/0 ; WOB 5-10; RPM: 50; Hrs. on bit: 59.25; BHA: Magnet, Bit Sub w/ float, 12- 6 1/4"DC, 9- HWDP ; MW: 7.9-8.6; Visc: 50; ph: 9.0; Pump#1: 6 x 16, SPM: 66; BPM: 9.9 ; Press: 880#; Hourly Summary: 1.5-Continue to open hole to 9 1/2" to 6287'. 4.5-Lost circulation @ 6287'. Attempt to regain circ. No success. POH 6 singles and regained circ. Circulate hole down, large volume of cuttings recovered. Lost approx. 400 bbls. 8.5-Wash back to 6287'. Continue to open hole to 7120'. 2.25-Lost circ. @ 7120'. Open hole to 7168'. .75- Wash back to 7120'. Open hole to 7168'. 2.5-Circ. on bottom, unable to drill. Bit torqued, and appeared to be on junk. Circulate hole clean. 3.0-POH, Bit out of gauge 3/8". cones pinched and outer teeth missing. 1.0-PU and MU 8" magnet and RIH.

REMARKS: Surveys: none.

Daily Cost: \$11,624

Cum. Cost: \$320,375

2/02/96

(Day 10)

TD: 2709'; Progress: 387' ; Present Oper: Reaming; Form:: ROP: 24'/hr; Bit#4: 9 1/2" Hughes R2 Jets 0/24/24 ; WOB 5-24; RPM: 50-65; Hrs. on bit: 16; BHA: Bit, Bit Sub w/ float, 12- 6 1/4"DC, 9- HWDP ; MW: 8.3; Visc:62-75; ph: 9.0; Pump#1: 6 x 16, SPM: 55-65; BPM: 8.25 ; Press: 750#; Hourly Summary: 2.5-RIH w/ magnet Stop @ 2663', Circulate X work magnet. No success. 1.0-POH w/ magnet. 2.0- Install skirt w/ hard facing onto magnet X RIH. Stop @ 2332'. Circulate X rotate magnet. No progress. 2.0-POH w/ magnet X LD. RIH w/new bit to 2322'. 4.0-Ream X Circ. from 2322' to 2456'. Large sloughing cuttings recovered. Raise visc. X circ. clean'. .05- RIH to 2603' X laydown 3 joints. 12.0-Hard reaming from 2603' to 2709'.

Remarks : Surveys: none.

Daily Cost: \$10,042

Cum. Cost: \$330,417

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# RANGELAND PETROLEUM

CORPORATION

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**FAX TRANSMISSION**

Page#: 1 of 2

<b>To:</b>		DATE AND TIME OF TRANSMISSION
NAME	Mr. Frank Matthews	January, 1996
COMPANY	State of Utah-Division of Oil, Gas & Mining	FAX NUMBER
		801/ 359-3940
<b>From:</b>		
NAME	Rangeland Petroleum Corp. -----	
SUBJECT	Daily Report for W-T State "2" No. 1B, Kane Co., Utah	
<b>Message:</b>		
Please find attached the daily drilling progress report for the subject well.		
Thank You.		
Mike Daniel		

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## RANGELAND PETROLEUM

CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

### W-T STATE "2" #1B

1988' FNL X 1983' FWL, Section 2,

Township 40S, Range 7E, Kane Co, Utah

### DAILY PROGRESS REPORT

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**2/03/96**

**(Day 11)**

TD: 2838'; Progress: 169' ; Present Oper: Reaming; Form.; ROP: 13.5'/hr;  
Bit#5: 9 1/2" Hughes J33 Jets 24/24/0 ; WOB 10-25; RPM: 65-80; Hrs. on bit: 7;  
Out @ 2807', Drilled 146'/ 7 hrs. Bit #6: Hughes 9 1/2" JD8 Jets 24/26/0; WOB: 35;  
RPM: 60; Hrs on bit: 5.5, In @ 2807'; BHA: Bit, Bit Sub w/ float, 12- 6 1/4" DC, 9- HWDP ;  
MW: 8.0; Visc: 53; ph: 9.0; Pump# 1: 6 x 16, SPM: 55; BPM: 8.25 ; Press: 475#; Hourly  
Summary: 1.5-POH to change bit, Lay down 3 jts., 1.0-RIH w/ new bit. Stopped @  
2661', 7.0-Hard ream from 2661' to 2807', 2.5-Chain out of hole slowly, 1.5-Slip @ cut  
drlg line, 0.50-WO new bit, 1.5-RIH w/ bit to 2362'. Taking weight. 3.0-Wash 2362' to  
2456'. Ream all tight spots. RIH to 2669'. Wash X ream to 2792', 5.5-Ream from 2792' to  
2838', hard drilling (ROP 8.4).

Remarks : Surveys: none.

Daily Cost: \$14,192

Cum. Cost: \$344,609

**2/04/96**

**(Day 12)**

TD: 2954'; Progress: 116' ; Present Oper: Reaming; Form.; ROP: 7'/hr;  
Bit #6: Hughes 9 1/2" JD8 Jets 24/24/0; WOB: 35-45; RPM: 60; Hrs on bit: 16.75;  
BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP ; MW: 8.0; Visc: 53; ph: 9.0; Pump# 1: 6 x 16,  
SPM: 55; BPM: 8.25 ; Press: 850#; Hourly Summary: 13.75-Cont. to open, very hard  
drilling. RO @ 5'-8' /hr. .0.25-Run survey. 2.0-Chain out of hole 2 1/2-Run DC's and

TD: 2954'; Progress: 116'; Present Oper: Reaming; Form:: ROP: 7'/hr;  
Bit #6: Hughes 9 1/2" JD8 Jets 24/24/0; WOB: 35-45; RPM: 60; Hrs on bit: 16.75;  
BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP; MW: 8.0; Visc: 53; ph: 9.0; Pump#1: 6 x 16,  
SPM: 55; BPM: 8.25; Press: 850#; Hourly Summary: **13.75**-Cont. to open, very hard  
drilling. RO @ 5'-8' /hr. ,**0.25**-Run survey, **2.0**-Chain out of hole, **2.0**- PU 9 DC's and  
RIH to 2632' took weight, **0.50**-wash 2362' to 2393',**0.25**-RIH to 2669', **0.75**-Wash X  
ream 2669' to 2732'. Ream all spots, **0.5**-Repair mud line. **1.25**-Wash X ream 2732' to  
2928', ream all tight spots, **2.75**-Drilling new hole from 2928' to 2954'. (ROP:10./hr.).  
Remarks : Survey; Deviation 1 degree @ 2910'. Bit started drilling new hole @ 2669'.  
Unable to get in old hole, continue drilling.

*Daily Cost: \$7,742      Cum. Cost: \$352,351*

**2/05/96**

**(Day 13)**

TD: 3169'; Progress: 215'; Present Oper: Wash to bottom; Form:: ROP: 11.6'/hr;  
Bit #6:(Rerun) Hughes 9 1/2" JD8 Jets 18/18/20; WOB: 45-55; RPM :60 Hrs on  
bit: 32.75, Out @ 3169', drilled 241' / 32.5 hrs. Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets  
18/18/20; WOB: 45-55; RPM: 60; BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP; MW: 8.0;  
Visc:53; ph: 9.0; Pump#1: 6 x 16, SPM: 55; BPM: 8.25; Press: 550#; Hourly Summary:  
**18.5**-Cont. to drill 9 1/2" hole from 2954' to 3169', **0.25**-WL Survey- misrun. **2.75**-Trip  
out of hole for bit, **0.50**-Replace fuel filter on pump #1, **2.0**-RIN hole. Took weight @  
2669'. Wash X ream to 2792'. RIH to 3008'. Wash X ream all tight spots to 3133'.  
Remarks : Surveys: none.

*Daily Cost: \$ 17,548*

*Cum. Cost: \$369,899*

210 N. Main St. • Midland, Texas 79701 • (915) 686-8983 • Fax (915) 686-7911

# RANGELAND PETROLEUM

CORPORATION

210 N Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

To:

NAME Mr. Frank Matthews	DATE AND TIME OF TRANSMISSION January, 1996
COMPANY State of Utah-Division of Oil, Gas & Mining	FAX NUMBER 801/ 359-3940

From:

NAME ---- Rangeland Petroleum Corp. ----
SUBJECT Daily Report for W-T State "2" No. 1B, Kane Co., Utah

Message:

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

# RANGELAND PETROLEUM

CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

### W-T STATE "2" #1B

**1986' FNL X 1983' FWL, Section 2,**

**Township 40S, Range 7E, Kane Co, Utah**

### DAILY PROGRESS REPORT

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**2/06/96**

**(Day 14)**

TD: 5886'; Progress: 3169' ; Present Oper: Reaming; Form:: ROP: 143'/hr;  
Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets 18/18/20; WOB: 0-10; RPM: 60; Hrs on Bit:  
51; BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP ; MW: 8.1; Visc: 47; ph: Pump#1: 6 x 16,  
SPM: 55-66; BPM: 8.25; Press: 850-950#; Hourly Summary: **0.50**-Wash X ream from  
3153' to 3169', **3.5**-Drilling open hole from 3169'-3256', **0.50**-Run WL Survey, **6.50**-  
Continue to drill open hole to 3380', high torque, unable to put weight on bit. Broke in  
to old wellbore, **1.25**-RIH w/ stands to 4219'. Break circulation every 5 stands X pump  
high visc. sweeps. **0.50**-Repair mud line from pump, **1.75**-RIH w/stands to 5389' .  
Break circ. every 5 stands, **1.0**-Wash X ream 5389' to 5512', **0.50**-RIH to 5605', **8.0**-  
Wash X ream 5605' to 5886'.

**Remarks :** Survey: Deviation 1 1/2 degrees @ 3253'. Bit started drilling into old hole @  
3169'. Broke completely thru old hole @ 3380'. Reaming old hole to bottom w/ 9 1/2" bit.

**Daily Cost: \$ 13,752**

**Cum. Cost: \$383,651**

**2/07/96**

**(Day 15)**

TD: 7128'; Progress: 1959' ; Present Oper: Logging returns; Form: Time: ROP: 87'/hr.

Daily Cost: \$ 13,752

Cum. Cost: \$383,651

2/07/96

(Day 15)

TD: 7138'; Progress: 1252'; Present Oper: Losing returns; Form: Lime; ROP: 67'/hr;  
Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets 18/18/20; WOB: 0-15; RPM: 60; Hrs on Bit:  
60.4; BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP ; MW: 8.0; Visc: 45; PV: 10, YP: 9; ph:  
9.0; WL: 15; Pump#1: 6 x 16, SPM: 55-60; BPM: 8.25-9.0; Press: 1100#; Hourly Summary:  
1.0-ream to 5949', 1.5-Circulate out air. Change out rotating head rubber, 2.0-ream to  
5980', 0.25-losing returns. MW @ 9.4, Visc @ 45. Dump return pit & rebuild volume,  
11.75-ream to 6779', 0.25-rig service, 4.0-ream to 7138', 1.0-circulate prior to short trip.  
Pump Hi-Vis sweep & lost returns. Working to regain circulation & rebuild volume. Lost  
approx. 400 bbls.

Remarks: Hauled two loads water. Received verbal approval on revised intermediate  
cement from R.J. Firth (Utah Div of Oil & Gas) at 4:00 PM on 2/6/96.

Daily Cost: \$ 8,935

Cum. Cost: \$392,586

210 N. Main St. • Midland, Texas 79701 • (915) 686-8983 • Fax (915) 686-7911

Remarks : Survey: Deviation 1 1/2 degrees @ 3253'. Bit started drilling into old hole @ 3169'. Broke c... etely thru old hole @ 3380'. Reaming... hole to bottom w/ 9 1/2" bit.  
Daily Cost: \$ 13,752 Cum. Cost: \$383,651

210 N. Main St. • Midland, Texas 79701 • (915) 686-8983 • Fax (915) 686-7911

— Copy 2/6/96 —

Robert Dodson 801/689-0498

Stg. 1-300 SKS —

7 5/8" x 9 1/2" hole.

Tail - 100 SKS

Stg. 2-60 SKS. ←

→ Volumes adjusted for condy. —

ORIG.  
TD. 7160'

6300'-6400' x  
(Reaming)

TD perhaps tonight.  
(a couple of short trips)



210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

**FAX TRANSMISSION**

Page#: 1 of 2

**To:**

NAME Mr. Frank Matthews	DATE AND TIME OF TRANSMISSION January, 1996
COMPANY State of Utah-Division of Oil, Gas & Mining	FAX NUMBER 801/ 359-3940

**From:**

NAME ---- Rangeland Petroleum Corp. ----
SUBJECT Daily Report for W-T State "2" No. 1B, Kane Co., Utah

**Message:**

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

~~5785147~~

✓ JRM  
DRF  
File

Order  
167-0  
Jot  
~~801-598-6999~~

*Confidential*

# RANGELAND PETROLEUM

CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

**W-T STATE "2" #1B**

**1988' FNL X 1983' FWL, Section 2,**

**Township 40S, Range 7E, Kane Co, Utah**

**DAILY PROGRESS REPORT**

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**2/06/96**

**(Day 14)**

TD: 5886'; Progress: 3169' ; Present Oper: Reaming; Form:: ROP: 143'/hr;  
Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets 18/18/20; WOB: 0-10; RPM: 60; Hrs on Bit:  
51; BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP ; MW: 8.1; Visc: 47; ph: Pump# 1: 6 x 16,  
SPM: 55-66; BPM: 8.25; Press: 850-950#; Hourly Summary: **0.50**-Wash X ream from  
3153' to 3169'. **3.5**-Drilling open hole from 3169'-3256', **0.50**-Run WL Survey, **6.50**-  
Continue to drill open hole to 3380', high torque, unable to put weight on bit. Broke in  
to old wellbore. **1.25**-RIH w/ stands to 4219'. Break circulation every 5 stands X pump  
high visc. sweeps. **0.50**-Repair mud line from pump, **1.75**-RIH w/stands to 5389'.  
Break circ. every 5 stands. **1.0**-Wash X ream 5389' to 5512', **0.50**-RIH to 5605', **8.0**-  
Wash X ream 5605' to 5886'.

**Remarks :** Survey: Deviation 1 1/2 degrees @ 3253'. Bit started drilling into old hole @  
3169'. Broke completely thru old hole @ 3380'. Reaming old hole to bottom w/ 9 1/2" bit.

**Daily Cost: \$ 13,752**

**Cum. Cost: \$383,651**

**2/07/96**

**(Day 15)**

TD: 7138'; Progress: 1252' ; Present Oper: Losing returns; Form: Lime; ROP: 67'/hr;  
Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets 18/18/20; WOB: 0-15; RPM: 60; Hrs on Bit:  
60.4; BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP ; MW: 8.0; Visc: 45; PV: 10, YP: 9; ph:  
9.0; WL: 15; Pump# 1: 6 x 16, SPM: 55-60; BPM: 8.25-9.0; Press: 1100#; Hourly Summary:  
1.0-ream to 5949', 1.5-Circulate out air. Change out rotating head rubber, 2.0-ream to  
5980', 0.25-losing returns. MW @ 9.4, Visc @ 45. Dump return pit & rebuild volume.  
11.75-ream to 6779'. 0.25-rig service, 4.0-ream to 7138', 1.0-circulate prior to short trip.  
Pump Hi-Vis sweep & lost returns. Working to regain circulation & rebuild volume. Lost  
approx. 400 bbls.

**Remarks:** Hauled two loads water. Received verbal approval on revised intermediate  
cement from R.J. Firth (Utah Div of Oil & Gas) at 4:00 PM on 2/6/96.

**Daily Cost: \$ 8,935**

**Cum. Cost: \$392,586**

**2/08/96**

**(Day 16)**

TD: 6487'; Progress: 0' ; Present Oper: Waiting on water; Form: Lime; ROP: 0'/hr;  
Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets 18/18/20; WOB: 0; RPM: 0; Hrs on Bit:  
60.4; BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP ; MW: 8.6; Visc: 40; PV: 0, YP: 0; ph:  
0; WL: 15; Pump# 1: 6 x 16, SPM: 60; BPM: 9.0; Press: 950#; Hourly Summary:  
**1.5**-Continue to circulate and lost circulation, lost approx. 600 bbls., **1.5**-POH 7 joints,  
**1.0**-Attempt to regain circulation, no success, lost approx. 400 bbls., **5.5**-Work pipe X  
hanging up, bit depth 6487'. Pump air & aerated mud to attempt to regain circ., lost  
approx. 500 bbls. **0.50**-MU and pump LCM poly-bloc & displace into annulus w/ 200  
bbls., **2.0**- Work pipe & wait on pill to setup, **12.0**-Wait on drill water. Work pipe, rotate  
pipe. At 3a.m. unable to rotate. Move pipe up and down. Pump away 50 bbls.

**Remarks:** Hauling water and should attempt to regain circulation this P.M..

**Daily Cost: \$12,192**

**Cum. Cost: \$404,778**

# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

To:

NAME <b>Mr. Frank Matthews</b>	DATE AND TIME OF TRANSMISSION <b>January, 1996</b>
COMPANY <b>State of Utah-Division of Oil, Gas &amp; Mining</b>	FAX NUMBER <b>801 / 359-3940</b>

From:

NAME <b>----- Rangeland Petroleum Corp. -----</b>
SUBJECT <b>Daily Report for W-T State "2" No. 1B, Kane Co., Utah</b>

Message:

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

**RANGELAND PETROLEUM**  
CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE****W-T STATE "2" #1B****1966' FNL X 1983' FWL, Section 2,****Township 40S, Range 7E, Kane Co, Utah****DAILY PROGRESS REPORT****NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.**2/09/96 (Day 17)**

TD: 6389'; Progress: 0' ; Present Oper: Back reaming; Form: Lime; ROP: 0'/hr; Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets 18/18/20; WOB: 0; RPM: 0; Hrs on Bit: 60.4; BHA: Sub w/ float, 21- 6 1/4" DC, 9- HWDP; MW: 8.6; Visc: 40; PV: 0, YP: 0; ph: 0; WL:; Pump#1: 6 x 16. SPM: 58; BPM: 8.7; Press: 800#: Hourly Summary: **8.75**-Work pipe while waiting on water. **3.75**-Start pumps, work pipe and regained circulation after pumping 250 bbls. Continue to circulate and condition mud. **11.5**-Pump out 1 single, hit tight spot at 6487' (probable key seat), back ream out of hole to 6389'.

**Remarks:** Contracted 6 water trucks out of Vernal, Kanab, Escalante, Lola, And Grand Junction to fill reserve pit to begin circulation. Worked all trucks approx. 24 hrs.

**Daily Cost: \$22,097      Cum. Cost: \$426,875**

FORM 8

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

5. Lease Designation and Serial Number:  
ML-45294

6. If Indian, Allottee or Tribe Name:  
N/A

7. Unit Agreement Name:  
N/A

8. Well Name and Number:  
W-T State "2" 1-B

9. API Well Number:  
43-025-11036

10. Field and Pool, or Wildcat:  
Wildcat

1. Type of Well: OIL  GAS  OTHER:

2. Name of Operator:  
RANGELAND PETROLEUM CORPORATION

3. Address and Telephone Number:  
210 N. Main, Midland, TX 79701 (915)686-8983

4. Location of Well:  
1988' fnl & 1983' fwl  
Footage:  
CO, Sec., T., R., M. SENW 2-40S-7E

County: Kane  
State: Utah

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

NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input type="checkbox"/> Multiple Completion <input checked="" type="checkbox"/> Other <u>Amend Intermediate Cement Job</u>	<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input type="checkbox"/> Other _____
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recomplete <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off
Approximate date work will start <u>2/15/96</u>	Date of work completion _____ <small>Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form. * Must be accompanied by a cement verification report.</small>

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

Stage 1 lead will be 300 sks Hi-Lift cmt w/12% D-20(gel), 1% D-79 (sodium metasilicate), 0.75% D-112 (fluid Loss), 3% D-44 (salt), 0.2% D-46 (defoamer), 0.25#/sk D-29(celloflake), and 2% ground rubber for 11.0 ppg and 3.58 yield. Tail will be 100 sks Class G w/0.25 #/sk D-29 and 2% CaCl for 15.8 ppg and 1.15 yield.

Stage tool will be placed at 1600' and stage 2 will be 60 sks Class G with same slurry and additives as Stage 1 tail.

This replaces Sundry Notice dated 1/5/96.

13. Name & Signature: Mike Daniel Mike Daniel Title: VP Date: 2/9/96

(This space for State use only)

(1994)

(See Instructions on Reverse Side)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

DATE: 2/9/96  
BY: [Signature]  
Verbal RJF

# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

**To:**

<small>NAME</small> Mr. Frank Matthews	<small>DATE AND TIME OF TRANSMISSION</small> January, 1996
<small>COMPANY</small> State of Utah-Division of Oil, Gas & Mining	<small>FAX NUMBER</small> 801 / 359-3940

**From:**

<small>NAME</small> ----- Rangeland Petroleum Corp. -----
--

SUBJECT

Daily Report for W-T State "2" No. 1B, Kane Co., Utah
---

**Message:**

<p>Please find attached the daily drilling progress report for the subject well.</p> <p style="text-align: center;">Thank You.</p> <p style="text-align: right;"><i>Mike Daniel</i></p>
---

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

✓ *JMM*

*DRF* *DRF*

*File*

*Confidential*

# RANGELAND PETROLEUM

CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

MAINTAIN ALL INFORMATION IN CONFIDENCE

**W-T STATE "2" #1B****1988' FNL X 1983' FWL, Section 2,****Township 40S, Range 7E, Kane Co, Utah****DAILY PROGRESS REPORT****NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.**2/09/96 (Day 17)**

TD: 6389'; Progress: 0'; Present Oper: Back reaming; Form: Lime; ROP: 0'/hr; Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets 18/18/20; WOB: 0; RPM: 0; Hrs on Bit: 60.4; BHA: Sub w/ float, 21- 6 1/4"DC, 9- HWDP; MW: 8.6; Visc:40; PV: 0; YP: 0; ph:0; WL:; Pump#1: 6 x 16. SPM:58; BPM: 8.7; Press: 800#; Hourly Summary: **8.75**-Work pipe while waiting on water, **3.75**-Start pumps, work pipe and regained circulation after pumping 250 bbls. Continue to circulate and condition mud. **11.5**-Pump out 1 single, hit tight spot at 6487' (probable key seat). back ream out of hole to 6389'.

**Remarks:** Contracted 6 water trucks out of Vernal, Kanab, Escalante, Lola, And Grand Junction to fill reserve pit to begin circulation. Worked all trucks approx. 24 hrs.

**Daily Cost: \$22,097      Cum. Cost: \$426,875**

**2/10/96 (Day 18)**

TD:0'; Progress: 0'; Present MU new bit; Form: n/a; ROP: 0'/hr; Bit # 5: (Rerun) Hughes 9 1/2" J33 Jets 18/18/20; WOB: 0; RPM: 0; Hrs on Bit: 69.75. Out @ 7138', drilled 4210' / 69.75 hrs. Bit #7: Hughes 9 1/2" JD8 Jets 20/18/18; BHA: Bit, Bit Sub, 12- 6 1/4"DC, 9- HWDP; MW: 8.8; Visc:45; PV: 0; YP: 0; ph:9; WL:; Pump#1: 6 x 16, SPM: 55; BPM: 8.75; Press: 600-900#; Hourly Summary: **8.5**-Cont. to back ream out of hole until free at +- 3620', **3.5**-POH to 3500' slowly. **3.0**-Circ. and condition mud, **1.5**-TOH slowly, hit tight spot @ ledge at 2500', **4.0**-Back ream X circulate to 2469', came free. **1.0**-RIH 1 stand, hit bridge, PU kelly, wash down 1 joint, bit torqued, slow progress and hard reaming. **2.5**- TOH to check bit, bit #5 1/2" out of gauge, inserts missing and broken.

**Remarks:** Laid down 9 drill collars and RIH w/ bit #7 and new BHA. Will try to wash and ream to 2900' and if clear will trip out and run 7 5/8" casing (casing crews arrived on location at 2:15a.m.).

**Daily Cost: \$12,144      Cum. Cost: \$439,019**

# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

<b>To:</b>	
NAME Mr. Frank Matthews	DATE AND TIME OF TRANSMISSION January, 1996
COMPANY State of Utah-Division of Oil, Gas & Mining	FAX NUMBER 801/ 359-3940

<b>From:</b>	
NAME ----- Rangeland Petroleum Corp. -----	
SUBJECT Daily Report for W-T State "2" No. 1B, Kane Co., Utah	

### Message:

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

## RANGELAND PETROLEUM CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

### **W-T STATE "2" #1B**

1988' FNL X 1983' FWL, Section 2,  
Township 40S, Range 7E, Kane Co, Utah

### **DAILY PROGRESS REPORT**

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**2/11/96 (Day 19)**

TD:2700'; Progress: 639' ; Present Oper:Wash X Ream; Form: n/a; ROP:53.25'/hr; Bit #7: Hughes 9 1/2" JD8 Jets 20/18/18, WOB: 0-35; RPM: 50-115;Out @ 2700'; Bit # 8: 9 1/2" HTC JD8 Jets 18/18/18, WOB: 0-10; RPM: 50; BHA: Bit, Bit Sub,12- 6 1/4"DC, 9- HWDP; MW: 8.9; Visc:60; PV: 0, YP: 0; ph:9; WL;; Pump#1: 6 x 16, SPM: 55-66; BPM: 8.75-9.5; Press: 800-900#; Hourly Summary: **2.75**-RIH w/ new bit took weight at 2061', **10.75**-Wash X ream to 2669'-hard reaming @ 2669' to 2700'. PU unable to go down, reream hole, not staying open, raise visc., bit stopped drilling. **3.5**-TOH bit, teeth worn and broken, 1/4" out of guage. **1.0**-Wait on welder to cut shoe on drill pipe. **0.75**-RIH w/ shoe to 2662', **0.75**-ream w/shoe- no success, **1.75**-TOH w/ drill pipe-shoe worn and bent, **2.0**-RIH w/ bit, tag @ 2347, **0.75**-Wash X ream from 2347' to 2391'.

**Remarks:** Extremely hard drilling- clean out 2669' to 2701' ( Shimarump congl.) recovered quartzitic rock chips and drill cuttings, the zone is destructive to drill bits. Loose cobble/boulder size rocks apparently roll over and into the well bore when drill pipe is tripped out- continued to clean out and stabilize the hole thru this interval so casing can be run. Released casing crew at 7 p.m. 2/10/96, released air operator at 7 a.m. 2/11/96, placed air compressors on stand by, holding Dowell on location in the event it becomes necessary to spot cement plug to stabilize the rubble zone.

Daily Cost: \$10,279 Cum. Cost: \$449,298

apparently run over and into the well bore when drill pipe is tripped out continued to clean out and stabilize the hole thru this interval so casing can be run. Released casing crew at 7 p.m. 2/10/96, released air operator at 7 a.m. 2/11/96, placed air compressors on stand holding Dowell on location in the event it becomes necessary to spot cement plug to stabilize the rubble zone.

**Daily Cost: \$10,279      Curr. Cost: \$449,298**

**2/12/96      (Day 20)**

TD:2708'; Progress: 361' ; Present WOC; Form: n/a; ROP: 42.4'/hr. ; Bit # 8: 9 1/2" HTC JD8 Jets 18/18/18, WOB: 0-10; RPM: 50-60; BHA: Bit, Bit Sub. 12- 6 1/4" DC, 9- HWDP; MW: 8.9; Visc:60; PV: 0. YP: 0; ph:9; WL:; Pump#1: 6 x 16, SPM: 55; BPM: 8.25; Press: 800#; Hourly Summary: **8.0**-Continue to wash/ream 2391'-2708' trip 3 stands, no problems. **4.0**-TOH w/ bit slowly, **2.25**-RIH open-ended, tag bottom @ 2366'. Attempt to circ. down, no success. TOH. **1.25**-RIH w/ 7 7/8" used bit, bit sub and 9 HWDC. Took weight at 2350'. **1.5**-Wash to 2758', **0.50**-Pump 40 SX hi-life and 160 SX class G and Disp. 2728'-2400'. **1.0**-POH 10 stands and circulate, **5.5**-Wait on cement. Lay down drill pipe. PU 6 1/4" BHA X RIH to 1610'.

Remarks: Surveys: none.

**Daily Cost: \$16,131      Curr. Cost: \$465,429**

# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

**To:**

<small>NAME</small> Mr. Frank Matthews	<small>DATE AND TIME OF TRANSMISSION</small> January, 1996
<small>COMPANY</small> State of Utah-Division of Oil, Gas & Mining	<small>FAX NUMBER</small> 801 / 359-3940

**From:**

<small>NAME</small> ----- Rangeland Petroleum Corp. -----
--

<small>SUBJECT</small> Daily Report for W-T State "2" No. 1B, Kane Co., Utah
---

**Message:**

<p>Please find attached the daily drilling progress report for the subject well.</p> <p style="text-align: center;">Thank You.</p> <p style="text-align: right;"><i>Mike Daniel</i></p>
---

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

CONFIDENTIAL

✓ JAM  
 DRF  
 file

# RANGELAND PETROLEUM

CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

MAINTAIN ALL INFORMATION IN CONFIDENCE

**W-T STATE "2" #1B****1988' FNL X 1983' FWL, Section 2,****Township 40S, Range 7E, Kane Co, Utah****DAILY PROGRESS REPORT****NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.**2/11/96 (Day 19)**

TD:2700'; Progress: 639'; Present Oper: Wash X Ream; Form: n/a; ROP: 0'/hr; Bit #7: Hughes 9 1/2" JD8 Jets 20/18/18, WOB: 0-35; RPM: 50-115; Out @ 2700'; Bit # 8: 9 1/2" HTC JD8 Jets 18/18/18, WOB: 0-10; RPM: 50; BHA: Bit, Bit Sub, 12- 6 1/4" DC, 9- HWDP; MW: 8.9; Visc: 60; PV: 0, YP: 0; ph: 9; WL:; Pump#1: 6 x 16, SPM: 55-66; BPM: 8.75-9.5; Press: 800-900#; Hourly Summary: **2.75**-RIH w/ new bit took weight at 2061', **10.75**-Wash X ream to 2669'-hard reaming @ 2669' to 2700'. PU unable to go down, reream hole, not staying open, raise visc., bit stopped drilling. **3.5**-TOH bit, teeth worn and broken, 1/4" out of gauge. **1.0**-Wait on welder to cut shoe on drill pipe. **0.75**-RIH w/ shoe to 2662', **0.75**-ream w/shoe- no success, **1.75**-TOH w/ drill pipe-shoe worn and bent, **2.0**-RIH w/ bit, tag @ 2347, **0.75**-Wash X ream from 2347' to 2391'.

**Remarks:** Extremely hard drilling- clean out 2669' to 2701' (Shimarump congl.) recovered quartzitic rock chips and drill cuttings, the zone is destructive to drill bits. Loose cobble/boulder size rocks apparently roll over and into the well bore when drill pipe is tripped out- continued to clean out and stabilize the hole thru this interval so casing can be run. Released casing crew at 7 p.m. 2/10/96, released air operator at 7 a.m. 2/11/96, placed air compressors on stand by, holding Dowell on location in the event it becomes necessary to spot cement plug to stabilize the rubble zone.

**Daily Cost: \$10,279 Cum. Cost: \$449,298**

**2/12/96 (Day 20)**

TD:2708'; Progress: 361'; Present WOC; Form: n/a; ROP: 42.4'/hr.; Bit # 8: 9 1/2" HTC JD8 Jets 18/18/18, WOB: 0-10; RPM: 50-60; BHA: Bit, Bit Sub, 12- 6 1/4" DC, 9- HWDP; MW: 8.9; Visc: 60; PV: 0, YP: 0; ph: 9; WL:; Pump#1: 6 x 16, SPM: 55; BPM: 8.25; Press: 800#; Hourly Summary: **3.0**-Continue to wash/ream 2391'-2708' trip 3 stands, no problems. **4.0**-TOH w/ bit slowly, **2.25**-RIH open-ended, tag bottom @ 2366'. Attempt to circ. down, no success. TOH. **1.25**-RIH w/ 7 7/8" used bit, bit sub and 9 HWDC. Took weight at 2350'. **1.5**-Wash to 2758', **0.50**-Pump 40 SX hi-life and 160 SX class G and Disp. 2728'-2400'. **1.0**-POH 10 stands and circulate. **5.5**-Wait on cement. Lay down drill pipe. PU 6 1/4" BHA X RIH to 1610'.

**Remarks:** Surveys: none.

**Daily Cost: \$16,131 Cum. Cost: \$465,429**

**2/13/96 (Day 21)**

TD:0'; Progress: 0'; Present WOC; Form: n/a; ROP: 0'/hr.; Bit # 8: 9 1/2" HTC JD8 Jets 18/18/18, WOB: 0; RPM: 0; BHA: Bit, Bit Sub, 12- 6 1/4" DC, 9- HWDP; MW: 8.8; Visc: 52; PV: 0, YP: 0; ph: 9; WL:; Pump#1: 6 x 16, SPM: ; BPM:; Press: 0#; Hourly Summary: **24.0**-Waiting on cement

**Remarks:** Surveys: none.

**Daily Cost: \$13,646 Cum. Cost: \$479,075**



210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

**FAX TRANSMISSION**

Page#: 1 of 2

**To:**

<small>NAME</small> Mr. Frank Matthews	<small>DATE AND TIME OF TRANSMISSION</small> January, 1996
<small>COMPANY</small> State of Utah-Division of Oil, Gas & Mining	<small>FAX NUMBER</small> 801 / 359-3940

**From:**

<small>NAME</small> ----- Rangeland Petroleum Corp. -----
<small>SUBJECT</small> Daily Report for W-T State "2" No. 1B, Kane Co., Utah

**Message:**

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

CONFIDENTIAL

*V JRM*

*DRF*

*File*

# RANGELAND PETROLEUM CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

**W-T STATE "2" #1B**

**1988' FNL X 1983' FWL, Section 2,**

**Township 40S, Range 7E, Kane Co, Utah**

**DAILY PROGRESS REPORT**

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**2/17/96 (Day 25)**

TD:0'; Progress: 0'; Present Oper: WOC; Form:; ROP:0'/hr.; MW:8.4; Visc:36; PV: 0; YP: 0; ph:; WL:; Pump#1: 6 x 16, SPM: 66; BPM:-9.9; Press: 500#; Hourly Summary: **11.0**-Continued to work and circ. stuck casing, casing free w/ 240,000 lbs. pull. lay down one joint. Circulate and condition hole, work pipe free. PU one joint and work and wash 13 ft. Laydown one joint. **2.0**-RU cementers and cement casing. Cement w/100 sacks class G w/.25/lb. per sack flow seal and 2% calcium chloride. Bumped plug @ 7:52 p.m., pressured up to 980 psi, bleed off and flowed holding. **11.0**-WOC ,RD casing equipment and casing crew. PU BOP, set slips and cut off casing.

**Remarks:** Ran 95 jts. of 7 5/8" casing w/ centralizers on joints 1 and 2. Landed float shoe at 3322' and float collar at 3276'.

**Daily Cost: \$37,767      Cum. Cost: \$546,484**

**2/18/96 (Day 26)**

TD: 3493'; Progress: 226'; Present Oper:Drilling; Form: Lime; ROP:19'/hr.; Bit #9: 6 1/2" HTC J-33 Jets open. In @ 3267', Out @ 3493'; WOB: 0-25; RPM: 45; BHA: Bit, Bit sub, 6-6 1/4" DC, 9-HWDP; MW:8.6; Visc:36; PV: 0; YP: 0; ph:; WL:; Pump#1: 6 x 16, SPM: 52; BPM:-7.8; Press: 400#; Hourly Summary: **1.0**-WOC, **8.0**-BOP test,( test rams, lines, valves, choke to 3,000 psi), **3.0**-MU BHA and RIH, tag cement @ 3267'. **12.0**-Drill cement float and shoe, wash X ream to 3359', hard drilling to 3493'.

**Remarks:** Casing run: total 77 jts.,( 1 jt.-N-80, 41jts.-WC-50 @ 29.70 ppf LTC, 15 jts-WC-50 @ 26.40 ppf ST&C, 20 Jts.-WC-70 @ 26.40 LT&C), 93 jts.-remaining on location.

**Daily Cost: \$13,728      Cum. Cost: \$562,212**

**2/19/96 (Day 27)**

TD: 3690'; Progress: 197'; Present Oper:Drilling; Form: Silt; ROP:11.8'/hr.; Bit #10: 6 1/2" HTC J-44 Jets 0/0/0, In @ 3493 ; WOB: 25-30; RPM: 45-55; BHA: Bit, Bit sub, 29 4 3/4" DC, XO, 9-HWDP; MW:8.0; Visc:35; PV: 0; YP: 0; ph:; WL:; Pump#1: 6 x 16, SPM: 66; BPM:-7.4; Press: 750#; Hourly Summary: **2.0**-POH, lay down 6 3/4' DC, **5.0**-MU Bit #10, PU 4 3/4" DC and RIH. **11.75**-Drilled 3493' to 3645',**0.25**-Service rig, **5.0**-Drilled 3645' to 3690'.

**Remarks:** Appear to be pushing debris down hole

**Daily Cost: \$12,224      Cum. Cost: \$574,436**

1996

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such purposes.

5. Lease Designation and Serial Number:

ML-45294

6. If Indian, Allottee or Tribe Name:

N/A

7. Unit Agreement Name:

N/A

8. Well Name and Number:

W-T State "2" L-B

9. API Well Number:

43-025-11036

10. Field and Pool, or Wildcat:

Wildcat

1. Type of Well: OIL  GAS  OTHER:

2. Name of Operator:  
RANGELAND PETROLEUM CORPORATION

3. Address and Telephone Number:  
210 N. Main, Midland, TX 79701 (915)686-8983

4. Location of Well:  
1988' fnl & 1983' fwl

County: Kane

State: Utah

Footages:  
QQ, Sec., T., R., M., SENW 2-40S-7E

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

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

- Abandon
- Repair Casing
- Change of Plans
- Convert to Injection
- Fracture Treat or Acidize
- Multiple Completion
- Other Amend Intermediate Cement Job
- New Construction
- Pull or Alter Casing
- Recomplete
- Reperforate
- Vent or Flare
- Water Shut-Off

Approximate date work will start 2/15/96

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

- Abandon
- Repair Casing
- Change of Plans
- Convert to Injection
- Fracture Treat or Acidize
- Other
- New Construction
- Pull or Alter Casing
- Reperforate
- Vent or Flare
- Water Shut-Off

Date of work completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

\* Must be accompanied by a cement verification report.

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

Stage 1 lead will be 300 sks Hi-Lift cmt w/12% D-20(gel), 1% D-79 (sodium metasilicate), 0.75% D-112 (fluid Loss), 3% D-44 (salt), 0.2% D-46 (defoamer), 0.25#/sk D-29(celloflake), and 2% ground rubber for 11.0 ppg and 3.58 yield. Tail will be 100 sks Class G w/0.25 #/sk D-29 and 2% CaCl for 15.8 ppg and 1.15 yield.

Stage tool will be placed at 1600' and stage 2 will be 60 sks Class G with same slurry and additives as Stage 1 tail.

This replaces Sundry Notice dated 1/5/96.

13.

Name & Signature:

*Mike Daniel*

Mike Daniel

Title:

VP

Date:

*2/9/96*

(This space for State use only)

*Matthew*

*Petroleum Engineer*

*2/20/96*

# RANGELAND PETROLEUM

CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

To:

NAME Mr. Frank Matthews	DATE AND TIME OF TRANSMISSION January, 1996
COMPANY State of Utah-Division of Oil, Gas & Mining	FAX NUMBER 801/ 359-3940

From:

NAME --- Rangeland Petroleum Corp. ---
SUBJECT Daily Report for W-T State "2" No. 1B, Kane Co., Utah

Message:

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

# RANGELAND PETROLEUM

CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

### W-T STATE "2" #1B

**1988' FNL X 1983' FWL, Section 2,**

**Township 40S, Range 7E, Kane Co, Utah**

### DAILY PROGRESS REPORT

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**2/21/96 (Day 29)**

TD: 4415'; Progress: 393'; Present Oper: Drilling; Form: ; ROP: 20.1'/hr.; Bit #10: 6 1/2" HTC J-44 Jets 0/0/0; WOB: 30-35; RPM: 50-55; Out @ 4069'; Bit #11: 6-1/2" HTC J-33 Jets 0/0/0; WOB: 30-35; RPM: 50-55; In @ 4069'; BHA: Bit, Bit sub, 29 4-3/4" DC, XO, 9-HWDP; MW:7.7; Visc: 34; Air: 500cfm; YP: 0; ph:: WL:: Pump#1: 6 x 16, SPM: 66; BPM:-7.4; Press: 750#; Hourly Summary: **2.5-Drilled 4022" to 4069', 0.50-Wireline Survey- misrun, 2.0-TOH for new bit, 2.0- Change bit, RIH w/new bit, ( Bit #10 In guage, bearings good, teeth worn 50%). 14.5-Ream X Drill from 4069' to 4322', 0.50-Service rig and test BOP, 2.5-drill to 4415'.**

**Remarks:** ROP varies from 1 minute/ft. to 5 minutes/ft.

**Daily Cost: \$11,850      Cum. Cost: \$595,341**

*File*  
*DRF*



# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

To:

NAME <b>Mr. Frank Matthews</b>	DATE AND TIME OF TRANSMISSION <b>January, 1996</b>
COMPANY <b>State of Utah-Division of Oil, Gas &amp; Mining</b>	FAX NUMBER <b>801 / 359-3940</b>

From:

NAME <b>----- Rangeland Petroleum Corp. -----</b>
--

SUBJECT <b>Daily Report for W-T State "2" No. 1B, Kane Co., Utah</b>
---

Message:

<p>Please find attached the daily drilling progress report for the subject well.</p> <p style="text-align: center;">Thank You.</p> <p style="text-align: right;"><i>Mike Daniel</i></p>
---

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

✓ FPM

✓ DRF

File

# RANGELAND PETROLEUM

CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

**W-T STATE "2" #1B**

**1988' FNL X 1983' FWL, Section 2,**

**Township 40S, Range 7E, Kane Co, Utah**

**DAILY PROGRESS REPORT**

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**2/21/96 (Day 29)**

TD: 4415'; Progress: 393'; Present Oper: Drilling; Form: ; ROP: 20.1'/hr.; Bit #10: 6 1/2" HTC J-44 Jets 0/0/0; WOB: 30-35; RPM: 50-55; Out @ 4069'; Bit #11: 6-1/2" HTC J-33 Jets 0/0/0; WOB: 30-35; RPM: 50-55; In @ 4069'; BHA: Bit, Bit sub, 29 4-3/4" DC, XO, 9-HWDP; MW:7.7; Visc: 34; Air: 500cfm; YP: 0; ph:; WL:; Pump#1: 6 x 16, SPM: 66; BPM:-7.4; Press: 750#; Hourly Summary: **2.5-Drilled 4022" to 4069', 0.50-Wireline Survey- misrun, 2.0-TOH for new bit, 2.0- Change bit, RIH w/new bit, ( Bit #10 in guage, bearings good, teeth worn 50%). 14.5-Ream X Drill from 4069' to 4322', 0.50-Service rig and test BOP, 2.5-drill to 4415'.**

**Remarks:** ROP varies from 1 minute/ft. to 5 minutes/ft.

**Daily Cost: \$11,850      Curr. Cost: \$595,341**

**2/22/96 (Day 30)**

TD: 4781'; Progress: 366'; Present Oper: TIII w/ bit #12; Form: Sand; ROP: 19.5'/hr.; Bit #11: 6 1/2" HTC J-44 Jets 0/0/0; WOB: 35; RPM: 50-60; Out @ 4781'; Bit #12: 6-1/2" HTC J-33 Jets 0/0/0; WOB:; RPM:; In @ 4781'; BHA: Bit, Bit sub, 29 4-3/4" DC, XO, 9-HWDP; MW:7.7; Visc: 34; Air:; YP: 0; ph:; WL:; Pump#1: 5 x 16, SPM: 66; BPM:6.8; Press: 800#; Hourly Summary: **1.5-Drilled 4415' to 4781' 1.0-Rig service-change out rotating head rubber, 17.25-Drilled 4447 to 4781' (drilling rate at bottom 15 to 20 minutes per foot. 0.25-rig service, 0.50-WLS-unable to go below 3902', 2.5-TOH for bit #12 (bit #11 broken and worn teeth, seals and bearings gone), 1.0-TIH for bit #12.**

**Remarks:** Surveys: 2-1/4 degrees @ 3902'.

**Daily Cost: \$12,105      Curr. Cost: \$607,446**

FEB 22 1996

REPORT OF WATER ENCOUNTERED DURING DRILLING

1. Well name and number: Willow TANK STATE "2" Well # 1 B  
 API number: 43-025-11036
2. Well Location: QQ SENW Section 2 Township 40S Range 7E County KANE County
3. Well operator: Rangeland Petroleum Corp  
 Address: 210 North Main St.  
Midland, TEXAS 79701 Phone: (915) 686-8983
4. Drilling contractor: Exeten Rig # 3  
 Address: 1670 Broadway Suite 3400  
Denver, Co 80202 Phone: \_\_\_\_\_
5. Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
1800	± 2000	Static	Fresh < 200 ppm Chlorides ± 120 ppm Calcium

*rig mud check*

6. Formation tops: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge. Date: 2-10-96

Name & Signature: S.D. Workman *S.D. Workman* Title: Drilling Supervisor

# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686 8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

### To:

NAME Mr. Frank Matthews	DATE AND TIME OF TRANSMISSION January, 1996
COMPANY State of Utah-Division of Oil, Gas & Mining	FAX NUMBER 801/ 359-3940

### From:

NAME ---- Rangeland Petroleum Corp. ----
SUBJECT Daily Report for W-T State "2" No. 1B, Kane Co., Utah

### Message:

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

# RANGELAND PETROLEUM CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

**W-T STATE "2" #1B**  
**1988' FNL X 1983' FWL, Section 2,**  
**Township 40S, Range 7E, Kane Co, Utah**

### DAILY PROGRESS REPORT

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**2/21/96 (Day 29)**

TD: 4415'; Progress: 393'; Present Oper: Drilling; Form: ; ROP: 20.1'/hr.; Bit #10: 6 1/2" HTC J-44 Jets 0/0/0; WOB: 30-35; RPM: 50-55; Out @ 4069'; Bit #11: 6-1/2" HTC J-33 Jets 0/0/0; WOB: 30-35; RPM: 50-55; In @ 4069'; BHA: Bit, Bit sub, 29 4-3/4" DC, XO, 9-HWDP; MW:7.7; Visc: 34; Air: 500cfm; YP: 0; ph:; WL:; Pump#1: 6 x 16, SPM: 66; BPM:-7.4; Press: 750#; Hourly Summary: **2.5**-Drilled 4022" to 4069', **0.50**-Wireline Survey- misrun, **2.0**-TOH for new bit, **2.0**- Change bit, RIH w/new bit, ( Bit #10 in gauge, bearings good, teeth worn 50%). **14.5**-Ream X Drill from 4069' to 4322', **0.50**-Service rig and test BOP, **2.5**-drill to 4415'.

**Remarks:** ROP varies from 1 minute/ft. to 5 minutes/ft.

**Daily Cost: \$11,850 Cum. Cost: \$595,341**

**2/22/96 (Day 30)**

TD: 4781'; Progress: 366'; Present Oper: TIH w/ bit #12; Form: Sand; ROP: 19.5'/hr.; Bit #11: 6 1/2" HTC J-44 Jets 0/0/0; WOB: 35; RPM: 50-60; Out @ 4781'; Bit #12: 6-1/2" HTC J-33 Jets 0/0/0; WOB:; RPM:; In @ 4781'; BHA: Bit, Bit sub, 29 4-3/4" DC, XO, 9-HWDP; MW:7.7; Visc: 34; Air:; YP: 0; ph:; WL:; Pump#1: 5 x 16, SPM: 66; BPM:6.8; Press: 800#; Hourly Summary: **1.5**-Drilled 4415' to 4781' **1.0**-Rig service-change out rotating head rubber, **17.25**-Drilled 4447 to 4781' (drilling rate at bottom 15

J-44 Jets 0/0/0; WOB: 35; RPM: 50-60; Out @ 4781'; Bit #12: 6-1/2" HTC J-33 Jets 0/0/0; WOB:: RPM:: In @ 4781'; BHA: Bit, Bit sub, 29 4-3/4" DC, XO, 9-HWDP; MW: ; Visc: 34; Air:: YP: 0; ph:: WL:: Pump#1: 5 x 16, SPM: 66; BPM:6.8; Press: 800#; Hourly Summary: 1.0-Drilled 4415' to 4781' 1.0-Rig service-change out rotating head rubber. 17.25-Drilled 4447 to 4781' (drilling rate at bottom 15 to 20 minutes per foot. 0.25-rig service, 0.50-WLS-unable to go below 3902', 2.5-TOH for bit #12 (bit #11 broken and worn teeth, seals and bearings gone), 1.0-TIH for bit #12.

Remarks: Surveys: 2-1/4 degrees @ 3902'.

Daily Cost: \$12,105 Cum. Cost: \$607,446

**2/23/96 (Day 31)**

TD: 5003'; Progress: 222' ;Present Oper: Drilling; Form: Sand; ROP: 12.3'/hr.; Bit #12: 6-1/2" HTC J-33 Jets 0/0/0; WOB:35; RPM:50-55; In @ 4781'; BHA: Bit, Bit sub, 29 4-3/4" DC, XO, 9-HWDP; MW:7.7; Visc: 34; Air: Non-aerated; YP: 0; ph:: WL:: Pump#1: 5 x 16, SPM: 66; BPM:6.8; Press: 800#; Hourly Summary: 2.0-TIH w/ bit #12, 0.50-Drilled 4781' to 4786', 1.0-Wireline Survey, 1.50-Drilled 4786' to 4805', 2.0-WLS-1-3/4 degrees @ 3322', 1-3/4 degrees @ 4000', 3-3/4 degrees @ 4300', 6 degrees @ 4630', 6-1/4 degrees @ 4776'. 1.0-Lay down 21 jts. RIH w/7 stands, 16.0-Drill 4805' to 5003'.

Remarks: Shell Surveys:1-1/4 degrees @ 3902, 1-3/4 degrees @ 4000', 1-1/2 degrees @ 4300, 3 degrees @ 4630' and 2-3/4 degrees @ 4776'. Absence of cuttings, no drag on connections, and no fill on trips indicate the bit is in the old hole.

Daily Cost: \$9,556 Cum. Cost: \$616,963

✓ JRM

210 N. Main St. • Midland, Texas 79701 • (915) 686-8983 • Fax (915) 686-7911

✓ DRP  
CONV File

# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

## FAX TRANSMISSION

Page#: 1 of 2

To:

NAME Mr. Frank Matthews	DATE AND TIME OF TRANSMISSION January, 1996
COMPANY State of Utah-Division of Oil, Gas & Mining	FAX NUMBER 801/ 359-3940

From:

NAME ----- Rangeland Petroleum Corp. -----
SUBJECT Daily Report for W-T State "2" No. 1B, Kane Co., Utah

Message:

Please find attached the daily drilling progress report for the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

# RANGELAND PETROLEUM CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE**

### W-T STATE "2" #1B

1988' FNL X 1983' FWL, Section 2,

Township 40S, Range 7E, Kane Co, Utah

### DAILY PROGRESS REPORT

**NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.

**3/02/96 (Day 39)**

TD: 6668'; Progress: 488' ;Present Oper: Drilling ; Form: LS/Dolo: ROP: 31'/hr.; Bit#19: 6-1/2" HTC J-55R Jets 0/0/0; WOB: 30; RPM:55; Out @ 6222'; Bit#20: 6-1/2" HTC J-44 Jets 0/0/0; WOB:20-25; RPM:40-110; In @ 6222'; BHA: Bit, Slow motor, Crossover, Sub, 36 4-3/4" spiral DC ; MW:7.7-8.4; Visc: 30; Air:350-400 CFM; YP:: ph:: WL:: Pump#1: 6 x 16, SPM: 48; BPM: 4.9; Press: 875#; Hourly Summary: **3.75**-Drilled 6180' to 6222', **0.75**-Circ. and run WLS, **3.0**-TOH, teeth worn, 1/16" out of gauge, cone loose, **3.5**-PU Dyna-drill and bit and RIH, **1.0**-Ream 90' to bottom, **12.0**-Drilled from 6222' to 6668'.  
**Remarks:** Surveys: 5 degrees @ 6222'

Daily Cost: \$13,603

Cum. Cost: \$727,376

**3/03/96 (Day 40)**

TD: 6926'; Progress: 258' ;Present Oper: Wash X Ream to Bottom; Form: Dolo/LS; ROP: 22'/hr.; Bit#20: 6-1/2" HTC J-44 Jets 0/0/0; WOB: 25; RPM:40-105; Out @ 6926'; Bit#21: 6-1/2" HTC J-44 Jets 0/0/0; WOB:0-10; RPM: 40-105; In @ 6926'; BHA: Bit, Slow motor, Crossover, Float sub, 36 4-3/4" spiral DC ; MW:8.4; Visc: 31; Air:: YP:: ph:: WL:: Pump#1: 6 x 16, SPM: 48; BPM: 4.9; Press:700-850#; Hourly Summary: **9.0**-Drilled 6668' to 6885', **0.25**-Function test BOP, **2.75**-Drilled 6885' to 6926', **0.50**-POH, tight after 3 stands out. pump out next 10 singles (6647' to 6337' then came from bit 1/16" out of

6-1/2" HTC J-44 Jets 0/0/0; WOB: 25; RPM:40-105; Out @ 6926'; Bit#21: 6-1/2" HTC J-44 Jets 0/0/0; WOB:0-10; RPM: 40-105; In @ 6926'; BHA: Bit, Slow motor, Crossover, Float sub, 36 4-3/4" spiral DC ; MW:8.4; Visc: 31; Air:: YP:: ph:: WL:: Pump#1: 6 x 16, SPM: 48; BPM: 4.9; Press:700-850#; Hourly Summary: **9.0**-Drilled 6668' to 6885', **0.25**-Function test BOP, **2.75**-Drilled 6885' to 6926', **0.50**-POH, tight after 3 stands out, pump out next 10 singles (6647' to 6337' then came free), bit 1/16" out of gauge. 50% teeth worn, one cone loose, **2.0**-PU new bit and RIH to 6012' and took weight, **4.5**-Wash X Ream 6012' to 6384', Mud up to 35 visc. and circ. out fine cuttings.

Remarks: Surveys: 4 degrees @ 6886' (Corrected depth on 3/02/96 report was 6668')

**Daily Cost: \$16,475      Cum. Cost: \$743,851**

**3/04/96      (Day 41)**

TD: 7141'; Progress: 215'; Present Oper: TIH; Form: Dolo; ROP: 14.8'/hr.; Bit#21: 6-1/2" HTC J-44 Jets 0/0/0; WOB: 20-27; RPM:40-105; Out @ 7141'; Bit#22: 6-1/2" HTC J-55R ; In @ 7141'; BHA: Bit, Slow motor, Crossover, Float sub, 36 4-3/4" spiral DC ; MW:8.5; Visc: 36; Air:300-400 CFM; YP:: ph:9; WL:: Pump#1: 6 x 16, SPM: 48; BPM: 4.9; Press:700-875#; Hourly Summary: **4.75**-Cont. to wash and ream to bottom,(some jts. took weight, others wash down, circ. out large volume of cuttings-red shale),**7.0**-Drilled 6926' to 7042', **0.25**-Function test BOP, **7.5**-Drilled 7042' to 7141'; **4.5**-TOH for new bit, hole tight for first five stands, bit engaged, teeth worn, cones locked up and motor bearing package worn.

Remarks: Surveys: none

**Daily Cost: \$22,749      Cum. Cost: \$766,600**

210 N. Main St. • Midland, Texas 79701 • (915) 686-8983 • Fax (915) 686-7911

# RANGELAND PETROLEUM CORPORATION

210 N. Main Street  
 Midland, TX 79701  
 PHONE #: (915) 686-8983  
 FAX #: (915) 686-7911

**FAX TRANSMISSION**      Page#: 1 of 2

<b>To:</b>	<small>NAME</small> <b>Mr. Frank Matthews</b>	<small>DATE AND TIME OF TRANSMISSION</small> <b>January, 1996</b>
	<small>COMPANY</small> <b>State of Utah-Division of Oil, Gas &amp; Mining</b>	<small>FAX NUMBER</small> <b>801/ 359-3940</b>
<b>From:</b>	<small>NAME</small> ----- <b>Rangeland Petroleum Corp.</b> -----	
	<small>SUBJECT</small> <b>Daily Report for W-T State "2" No. 1B, Kane Co., Utah</b>	
<b>Message:</b>	<p>Please find attached the daily drilling progress report for the subject well.</p> <p style="text-align: center;">Thank You.</p> <p style="text-align: right;"><i>Mike Daniel</i></p>	

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

*✓ JPM*  
*File*  
*Confidential*

**RANGELAND PETROLEUM**  
CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE****W-T STATE "2" #1B****1988' FNL X 1983' FWL, Section 2,  
Township 40S, Range 7E, Kane Co, Utah****DAILY PROGRESS REPORT****NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.**3/15/96 (Day 52)**

TD: 8704'; Progress: 22'; Present Oper: RIH; Form: SS; ROP: 4'/hr. Bit#28: 6-1/2" Reed FP62 Jets 0/0/0;  
WOB:20-28; RPM:30; Out @ 8704'; Bit #29: Jets 0/0/0; In @ 8704' BHA: Bit, Bit sub, w/ Float, 36 4-  
3/4" spiral DC : MW:7.7-8.5(Aerated); Visc: 42; Air: 450-500 CFM; PV: 6; YP: 8; Gels: 5-11; ph:8.5;  
WL:12; Pump#1: 6 x 16, SPM: 48; BPM: 4.8; Press: 650#; Hourly Summary: **5.5**-Cont. to drill from 8682'  
to 8704'. **1.0**- POH to 6700', **2.0**- Circ. out air and lose circ., prep 17 bbl. pill of poly-bloc across  
Mississippian, **3.50**-POH, bit teeth 100% worn, 1/8" out of gauge, function test BOP, **2.0**-RIH to 5000'  
break circ. and RIH to 6010', **7.0**-Ream 6010' to 6120', no progress, POH 3 singles, wash/ream back to  
6120', no go . excessive drag, **0.50**-Circ. out air, **2.50**-POH, Drag first 3 stands, bit green.

**Remarks:** surveys: none

Daily Cost : \$16,036

Cum. Cost: \$923,115

43-025-11036

0485T

ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator Rangeland Petroleum Co.

Representative Terry Michaels Telephone No. \_\_\_\_\_

Well Name and No. WT State 2 #1-D

Location SE 1/4 NW 1/4, Sec. 2 T. 40S R. 7E County KANS

Lease Type (Federal, Tribal, State or Private) STATE

Has operator obtained proper Federal or Tribal approval? \_\_\_\_\_

T. D. 6150 Open hole from 3372 to 6150  
(8704)

Hole Size	Casing Size	Set at	TOC	Pull Casing?
<u>9 5/8</u>	<u>7 5/8</u>	<u>3372'</u>	<u>Surface</u>	<u>No</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Formation	Top	Base	Shows?
<u>Miss</u>	<u>6120</u>	_____	_____
<u>Hermosa</u>	<u>5340</u>	_____	_____
<u>Kiabiak</u>	<u>3040</u>	_____	_____
_____	_____	_____	_____

Plugging procedure:

- Plug #1 100' btm of hole 6150-6050
- Plug #2 100' Hermosa 5440-5340
- Plug #3 50' in 50' out 7 5/8 shoe 3422-3322
- plug #4 50' @ surface

Install dry hole marker

Remarks: (DST's, LCZ's, Water flows, etc.)

Tapout sds 8550'-8700'  
Bought Angel no clear pick

Approved by JM [Signature] Date 3/17/96 Time 7:30 PM

**RANGELAND PETROLEUM**  
CORPORATION

210 N. Main Street  
Midland, TX 79701  
PHONE #: (915) 686-8983  
FAX #: (915) 686-7911

**FAX TRANSMISSION**Page#: 1 of 2**To:**

NAME

Mr. Frank Matthews

DATE AND TIME OF TRANSMISSION

January, 1996

COMPANY

State of Utah-Division of Oil, Gas &amp; Mining

FAX NUMBER

801/ 359-3940

**From:**

NAME

--- Rangeland Petroleum Corp. ---

SUBJECT

Daily Report for W-T State "2" No. 1B, Kane Co., Utah

**Message:**

Please find attached the daily drilling progress report for  
the subject well.

Thank You.

*Mike Daniel*

If this transmission is received incomplete or illegible, please call 915/ 686-8983.

**RANGELAND PETROLEUM**  
CORPORATION

\*\*\*\*\* TIGHT HOLE \*\*\*\*\*

**MAINTAIN ALL INFORMATION IN CONFIDENCE****W-T STATE "2" #1B****1988' FNL X 1983' FWL, Section 2,  
Township 40S, Range 7E, Kane Co, Utah****DAILY PROGRESS REPORT****NOTE:** Each report reflects the 24-hr record of operations from 7:00am the previous day to 7:00am report day.**3/19/96 (Day 56)****TD:: Progress: ; Present Operation: RELEASED RIG; Hourly Summary: 6.5-Wait on cementers and commence rig breakdown, 3.0-Set cement plugs @ 6100' to 6000', 5440' to 5340', 3422' to 3322'. 2.75-WOC. RIH to tag cement, no plug to 3450'. 1.0-Pump second plug 3450' to 3050'. 2.5- WOC, laydown drill pipe. 1.0-RIH and tag cement at 3300'. 7.5-Laydown DP and rig down BOP and wellhead. Rig released at 0700 hrs. on 3/19/96.****Daily Cost : \$27,482      Cum. Cost: \$987,961**

CONFIDENTIAL

RECEIVED

APR - 5 1996

FORM 8

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

DIV OF OIL, GAS & MINING

3. LEASE DESIGNATION AND SERIAL NO.

ML-45294

[NOTE: RE-ENTRY OF SHELL'S SODA UNIT WELL No. 8]

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
1. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other PLUG & ABANDON

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

7. UNIT AGREEMENT NAME  
N/A

8. FARM OR LEASE NAME  
W-T STATE "2"

9. WELL NO.  
1B

2. NAME OF OPERATOR  
RANGELAND PETROLEUM CORPORATION

10. FIELD AND POOL, OR WILDCAT  
WILDCAT

3. ADDRESS OF OPERATOR  
210 NORTH MAIN ST. MIDLAND, TX 79701

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA  
SEANW SEC. 2, T40S, R7E

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface 1988' FNL & 1983' FWL, SEC. 2, T40S, R7E  
At top prod. interval reported below  
At total depth

14. API NO. 43-025-11036 | DATE ISSUED 11/30/95

12. COUNTY KANE | 13. STATE UTAH

15. DATE SPUDDED 1/23/96 | 16. DATE T.D. REACHED 3/15/96 | 17. DATE COMPL. (Ready to prod.) 3/18/96 (Plug & Abd.) | 18. ELEVATIONS (OF. RES. RT. GR. ETC.) 4757' GL, 4767' KB | 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 8704' MD | 21. PLUG BACK T.D., MD & TVD | 22. IF MULTIPLE COMPL. HOW MANY | 23. INTERVALS DRILLED BY ROTARY TOOLS 7155'-8704' | CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) NONE | 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN ELECTRIC - NONE, MUD LOG 4-5-96 (SEE RIGHT SIDE OF FILE) | 27. WAS WELL CORED YES  NO  (See analysis) | DRILL STEM TEST YES  NO  (See reverse side)

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7 5/8" OD	29.70*	3322'	9 1/2"	100 SX Class G w/ 2% CaCl	NONE

29. LINER RECORD | 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A					N/A		

31. PERFORATION RECORD (Interval, size and number) NONE | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
N/A	

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
N/A							
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
FLOW, TUBING PRBS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) | TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED [Signature] TITLE VP - Operations DATE March 27, '96

See Spaces for Additional Data on Reverse Side





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

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

November 5, 1996

Rangeland Petroleum  
210 North Main Street  
Midland, Texas 79701

Re: Proposed Teasdale #1 Well, Section 16, Township 30 South,  
Range 6 East, Wayne County, Utah

Gentlemen:

The Division has received the enclosed letter from the Utah Division of Wildlife Resources (DWR) which outlines their concerns and recommendations relative to the referenced well. Please consider DWR's recommendations for revegetation, tree avoidance, and stream dewatering as additional stipulations to our previous letter of Approval to Drill. Also, consider DWR's suggested seeding mix for use at the State No. 2, Section 2, Township 40 South, Range 7 East, location if you have not already reclaimed that site.

If we can be of any further assistance in this matter, please contact this office.

Sincerely,

R. J. Firth  
Associate Director, Oil & Gas

Enclosure

cc: Brian Wood, Permits West  
Ed Bonner, S&ITLA





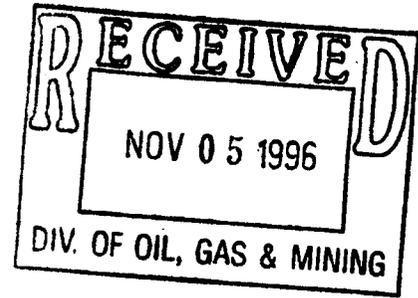
State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WILDLIFE RESOURCES

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

Robert G. Valentine  
Division Director

Southern Region  
622 North Main Street  
PO Box 606  
Cedar City, Utah 84721-0606  
801-586-2455  
801-586-2457 (Fax)



October 18, 1996

Mr. Gil Hunt  
Environmental Manager  
1594 W. North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

Dear Mr. Hunt:

Thank you for the opportunity to review the Teasdale #1 Wildcat oil well site, nine miles S.E. of Torrey, Utah on 4 October 1996. As a follow up to our discussion at the well site, we would like to submit the following suggestions and recommendations for proceeding with this project.

1. This site is within critical mule deer winter range, 11/1-5/15 and receives some winter use by elk and Merriam's wild turkey. Because the site is presently vegetated with a mature pinyon /juniper stand, the present forage value for these animals is low. We, therefore, do not feel there will be a major impact to these animals from activities associated with the wildcat well. Should oil be discovered at this site, however, expansion of the disturbed area away from this isolated site has the potential to greatly impact wintering wildlife. For the present, revegetation of the site following drilling activities could provide a much needed benefit in this area. Please find attached a suggested planting/seeding mixture (A) that is recommended for this habitat zone. Providing a good mixture of as many of these plants as possible should go a long way toward mitigation of impacts from the well.
2. There are a few ponderosa pine trees along the access road into the drill site. These trees are a very important wildlife habitat component in this otherwise pure stand of pinyon/juniper. They provide raptor and songbird roost/perch sites, cavity nest sites for small birds and mammals, and winter roost sites for wild turkeys. Any new road alignments or widening should avoid these trees where possible. This should include, not only the large mature trees, but also small ponderosa pine that will provide future habitat benefits.



Mr. Gil Hunt  
October 18, 1996  
Page 2

3. Use of water out of the indicated tributary to Carcass Creek should not amount to dewatering the stream. There are no known fisheries in this small stream, however, it contains a healthy riparian community of willows and river birch. Riparian zones are critical habitat to a wide array of wildlife. This is also an important watering area for wildlife.
  
4. It was mentioned at the site review that rehabilitation of wildcat well W-T, State No. 2-1at T405, R7E, Sec.2, will occur in the near future. Please find the attached seeding suggestions (B) for use in revegetation of this site. The rehab plan should include as many of these plants as possible to enhance wildlife values at this location.

Should you require further assistance with these projects, please feel free to contact this office.

Sincerely,

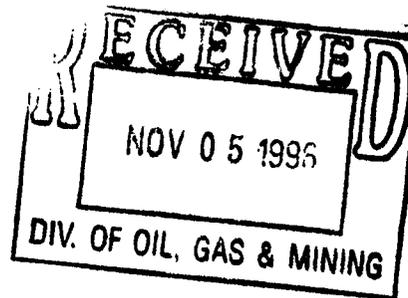
A handwritten signature in black ink, appearing to read "James G. Guymon". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James G. Guymon  
Regional Supervisor

JGG/BLB/lb

cc: Leon Bogedahl  
Larry Dalton (SLO)  
Walt Donaldson (SLO)

# Attachment A



Recommended guidelines for seedbed preparation and planting techniques within the SUBMONTANE ecological association.

- A. Seedbed Preparation: (1) Disturbed areas should be double ripped. (2) Fertilizer (0-16-8) at a rate of 50 lb/acre should be disked into the topsoil mass prior to seeding. (3) Where possible, the grass segment of the seed mix should be drilled. The remainder of the seed mix should be hydrosprayed in a slurry containing tackifier (60 lb/acre) and wood fiber mulch (400 lb/acre). This first application containing the seed should be immediately followed by another hydrosprayed slurry to incorporate more tackifier (60 lb/acre), more wood fiber mulch (2,000 lb/acre), and nitrogen fertilizer (33-0-0 distributed at a rate of 50 lb/acre). (3a) If a hydrospray technique is not utilized, the entire seed mix should be drilled. (3b) If broadcast, the seed mix should be doubled, spread and covered through use of a harrow or chain. (4) After seed application (3a or 3b), nitrogen fertilizer (33-0-0 distributed at a rate of 50 lb/acre) should be broadcast and an acceptable mulch should be applied at a rate of 2,000 lb/acre to protect the raw soil from erosion and to conserve moisture. Mulch should be held in place by tackifying, crimping, or netting. (5) Seeding should occur following a permanent killing frost which is usually after October 1.
- B. Nursery Stock or Transplants: Planting of nursery or transplant stock should occur in the spring when soil moisture is greatest. Nursery stock should be planted after dormancy breaks; greatest success for transplant stock is achieved during dormancy. Shoots spaced 2, 3, 4, 6, 10, 12, 13, and 15 feet apart will achieve 10888, 4840, 2722, 1210, 436, 302, 258, and 193 plants per acre, respectively. A goal of 60% canopy cover should be reached. All plantings need to have the soil compacted around the roots.
- C. Cuttings of Woody Riparian Species (willow, cottonwood, etc.): Cut stems at a length of 12 to 18 inches from 1-3 year old local, wild stock (0.5 to 1.0 inch diameter) with a 30-45° angle at the basal end. Lateral branches and leaves must be removed. Cuttings can be immediately transplanted or cold stored until the ground thaws. The basal end can be dipped in indolebutyric acid prior to planting to aid in root formation. When planting, all but one inch of the stem should be extended into the moist soil to a depth of the water table. This will protect recreators from inadvertent injury. Dormant logs (1.5 to 6 inches diameter and up to 20 feet long) can also be used for many species as long as the water table is reached.
- D. Bare-root or Containerized Plants: Prior to planting, bare-root or containerized plants should be stored at 34-39° F for one week to "harden." Planting should be in an adequately sized hole to insure that roots are well distributed and extending full length into the hole. For both bare-root and containerized stock, care needs to be taken that the root hairs are not allowed to dry. The entire edge of the root mass for containerized stock should be scarified to alleviate root binding.
- E. Plugs: Plugs of vegetation can be excavated with a shovel or front-end loader. They should be handled such that moist soil remains packed firmly around the roots. A similar sized hole needs to be excavated and the plug planted.
- F. Rhizomic Plants: Woody plants with interconnected root stock should be located and excavated intact. The tops of the plants should be removed so that only one remains. Connecting roots should be aligned vertically and buried. In the instance of herbaceous plants, the rhizomes can be harvested with a front-end loader, and distributed with a manure spreader. A one inch layer of top soil should be compacted over plantings.

Table 1. Revegetation prescription for disturbed areas within the PINYON/JUNIPER ecosystem in the SUBMONTANE ecological association.<sup>1</sup>

Plant Material	Pounds of Pure Live Seed/Acre
<b>GRASS SPECIES<sup>2</sup></b>	
Smooth brome ( <u>Bromus inermis</u> )	1.5 (southern variety)
Hard sheep fescue ( <u>Festuca ovina</u> )	0.5
Intermediate wheatgrass ( <u>Agropyron intermedium</u> )	1.0
Alkalisacaton ( <u>Sporobolus airoides</u> )	1.0
Russian wildrye ( <u>Elymus junceus</u> )	1.0
Indian ricegrass ( <u>Stipa hymenoides</u> )	0.5
Orchardgrass- ( <u>Dactylis glomerata</u> )	1.0
Pubescent wheatgrass ( <u>Agropyron intermedium trichophorum</u> )	1.0
<b>FORB SPECIES<sup>3</sup></b>	
Utah sweetvetch ( <u>Medysarum boreale</u> )	1.5 (Out of hull)
Alfalfa ( <u>Medicago sativa</u> )	1.5 (Ladak, Nomed or Spreader)
Small burnet ( <u>Sanguisorba minor</u> )	1.0
Yellow sweetclover ( <u>Helilotus officinalis</u> )	0.5
Palmer penstemon ( <u>Penstemon palmeri</u> )	0.5
Lewis flax ( <u>Linum lewisii</u> )	1.0
<b>SHRUB AND TREE SPECIES<sup>4</sup></b>	
Wyoming big sagebrush ( <u>Artemisia tridentata wyomingensis</u> ) <sup>6</sup>	0.5 (20% purity)
Basin big sagebrush ( <u>A. t. tridentata</u> ) <sup>6</sup>	0.5 (20% purity)
Fourwing saltbush ( <u>Atriplex canescens</u> )	1.0
Winterfat ( <u>Eurotia lanata</u> )	0.5
Forage kochia ( <u>Kochia prostrata</u> )	0.5
TOTAL	16.5

NURSERY OR TRANSPLANT STOCK <sup>5</sup>	STEMS/ACRE (SPACING)
Fourwing saltbush ( <u>Atriplex canescens</u> )	Plant 545 of each species
True mountainmahogany ( <u>Cercocarpus montanus</u> )	per acre randomly placed
Utah serviceberry ( <u>Amelanchier utahensis</u> )	4 feet apart to reach
Common chokecherry ( <u>Prunus virginiana</u> )	a goal of 2,722 stems/acre
Forage kochia ( <u>Kochia prostrata</u> )	

<sup>1</sup>Note attachment: Recommended guidelines for seedbed preparation and planting techniques in the SUBMONTANE ecological association.

<sup>2</sup>Alternate grass species: Western wheatgrass (Agropyron smithii), Bluebunch wheatgrass (Agropyron spicatum), Basin wildrye (Elymus cinereus), Bottlebrush squirreltail (Sitanion hystrix), Sixweeks fescue (Festuca octoflora), Littleseed ricegrass (Oryzopsis microantha) Needle-and-thread grass (Stipa comata).

<sup>3</sup>Alternate forb species: Arrowleaf balsamroot (Balsamorhiza sagittata), Pacific aster (Aster chilensis), Bouncingbet (Speria officinalis), Gooseberryleaf globemallow (Sphaeralcea grossularisefolia).

<sup>4</sup>Alternate shrub and tree species: Mountain big sagebrush (Artemisia tridentata vaseyana),<sup>6</sup> Black sagebrush (Artemisia nova),<sup>6</sup> White rubber rabbitbrush (Chrysothamnus nauseosus),<sup>6</sup> True mountainmahogany (Cercocarpus montanus), Curleaf mountainmahogany (Cercocarpus ledifolius), Squaw-apple (Peraphyllum ramosissimum), Mexican cliffrose (Covania mexicana).

<sup>5</sup>Alternate nursery or transplant stock species: Common snowberry (Symphoricarpos albus), Mexican cliffrose (Covania mexicana), Green Mormon tea (Ephedra viridis), Nevada Mormon tea (Ephedra nevadensis).

<sup>6</sup>This species should not be covered. It should be hydroseeded in the seed mix slurry or broadcast over the surface after drilling or covering of other seed and before application of mulch.

## Attachment B

Recommended guidelines for seedbed preparation and planting techniques within the COLD DESERT ecological association.

- A. Seedbed Preparation: (1) Disturbed areas should be double ripped. (2) Fertilizer should not be applied. (3) Where possible, the grass segment of the seed mix should be drilled. The remainder of the seed mix should be hydrosprayed in a slurry containing tackifier (60 lb/acre) and wood fiber mulch (400 lb/acre). This first application containing the seed should be immediately followed by another hydrosprayed slurry to incorporate more tackifier (60 lb/acre) and more wood fiber mulch (2,000 lb/acre). (3a) If a hydrospray technique is not utilized, the entire seed mix should be drilled. (3b) If broadcast, the seed mix should be doubled, spread and covered through use of a harrow or chain. (4) After seed application (3a or 3b), an acceptable mulch should be applied to protect the raw soil from erosion and to conserve moisture. (5) Seeding should not occur before a permanent killing frost, which is usually after October 15, nor any later than March 15.
- B. Nursery Stock or Transplants: Planting of nursery or transplant stock should occur in the spring when soil moisture is greatest. Nursery stock should be planted after dormancy breaks, however, greatest success for transplant stock is achieved during dormancy. Shoots spaced 2, 3, 4, 6, 10, 12, 13, and 15 feet apart will achieve 10888, 4840, 2722, 1210, 436, 302, 258, and 193 plants per acre, respectively. A goal of 60% canopy cover should be reached. All plantings need to have the soil compacted around the roots.
- C. Cuttings of Woody Riparian Species (willow, cottonwood, etc.): Cut stems at a length of 12 to 18 inches from 1-3 year old local, wild stock (0.5 to 1.0 inch diameter) with a 30-45° angle at the basal end. Lateral branches and leaves must be removed. Cuttings can be immediately transplanted or if cut in winter cold stored in snow-filled bags until the ground thaws. The basal end can be dipped in indolebutyric acid prior to planting to aid in root formation. When planting, all but one inch of the stem should be extended into the moist soil to a depth of the water table. This will also protect recreators from inadvertent injury. Dormant logs (1.5 to 6 inches diameter and up to 20 feet long) can also be used for many species as long as the water table is reached.
- D. Bare-root or Containerized Plants: Prior to planting, bare-root seedlings or containerized plants should be stored at 34-39° F for one week to "harden". Planting should be in an adequately sized hole to insure that roots are well distributed and extending full length into the hole. For both bare-root and containerized stock, care needs to be taken that the root hairs are not allowed to dry. The entire edge of the root mass for containerized stock should be scarified to alleviate root binding.
- E. Plugs: Plugs of vegetation can be excavated with a shovel or front-end loader. They should be handled such that moist soil remains packed firmly around the roots. A similar sized hole needs to be excavated and the plug planted.
- F. Rhizomic Plants: Woody plants with interconnected root stock should be located and excavated intact. The tops of the plants should be removed so that only one remains. Connecting roots should be aligned vertically and buried. In the instance of herbaceous plants, the rhizomes can be harvested with a front-end loader, and distributed with a manure spreader. A one inch layer of top soil should be compacted over the planting.

Table 1. Revegetation prescription for disturbed areas within the SALTBUSH/GRASS ecosystem in the COLD DESERT ecological association.<sup>1</sup>

Plant Material	Pounds of Pure Live Seed/Acre
<b>GRASS SPECIES<sup>2</sup></b>	
Western wheatgrass ( <u>Agropyron smithii</u> )	1.0
Intermediate wheatgrass ( <u>Agropyron intermedium</u> )	1.0 (High crest)
Crested wheatgrass ( <u>Agropyron cristatum</u> )	1.0
Sand dropseed ( <u>Sporobolus cryptandrus</u> )	1.0
Bottlebrush squirreltail ( <u>Sitanion hystrix</u> )	0.5
Indian ricegrass ( <u>Oryzopsis hymenoides</u> )	0.5
Galleta ( <u>Hilaria jamesii</u> )	0.5
<b>FORB SPECIES<sup>3</sup></b>	
Utah sweetvetch ( <u>Hedysarum germinale</u> )	1.0
Alfalfa ( <u>Medicago sativa</u> )	1.0 (Ladak)
Small burnet ( <u>Sanguisorba minor</u> )	1.0
Gooseberryleaf globemallow ( <u>Sphaeralcea grossularifolia</u> )	0.5
Eaton penstemon ( <u>Penstemon eatonii</u> )	0.5
Lewis flax ( <u>Linum lewisii</u> )	1.0
Yellow sweetclover ( <u>Melilotus officinalis</u> )	0.25
<b>SHRUB AND TREE SPECIES<sup>4</sup></b>	
Fourwing saltbush ( <u>Atriplex canescens</u> )	2.0
Winterfat ( <u>Eurotia lanata</u> )	0.5
White rubber rabbitbush ( <u>Chrysothamnus nauseosus hololeucus</u> ) <sup>6</sup>	0.5
Black sagebrush ( <u>Artemisia arbuscula nova</u> ) <sup>6</sup>	0.5 (20% purity)
Basin big sagebrush ( <u>Artemisia tridentata tridentata</u> ) <sup>6</sup>	0.5 (20% purity)
Shadscale ( <u>Atriplex confertifolia</u> )	1.0
Gardner saltbush ( <u>Atriplex gardneri</u> )	0.5
TOTAL	<u>16.25</u>
<b>MURSEY OR TRANSPLANT STOCK<sup>5</sup></b>	
Antelope bitterbrush ( <u>Purshia tridentata</u> )	Plant 500 of each species per acre. Random placement should be 4 feet apart, to reach a goal of 2500 stems/acre.
Fourwing saltbush ( <u>Atriplex canescens</u> )	
Mexican cliffrose ( <u>Cowania mexicana</u> )	
Spiny hopsage ( <u>Grayia spinosa</u> )	
Longflower snowberry ( <u>Symphoricarpos longiflorus</u> )	

<sup>1</sup>Note attachment: Recommended guidelines for seedbed preparation and planting techniques in the COLD DESERT ecological association.

<sup>2</sup>Alternate grass species: Pubescent wheatgrass (Agropyron intermedium trichophorum), Thickspike wheatgrass (Agropyron dasystachyum), Alkalisacaton (Sporobolus airoides), Spike dropseed (Sporobolus contractus), Orchardgrass (Dactylis glomerata), Russian wildrye (Elymus junceus), Galleta (Hilaria jamesii).

<sup>3</sup>Alternate forb species: Redstem filaree (Erodium cicutarium), Scarlet globemallow (Sphaeralcea coccinea), American vetch (Vicia americana), Showy goldeneye (Helianthus multiflorus), Palmer penstemon (Penstemon palmeri), Creeping penstemon (Penstemon linarioides).

<sup>4</sup>Alternate shrub and tree species: Nuttall saltbush (Atriplex nuttallii), Wyoming big sagebrush (Artemisia tridentata wyomingensis), Mexican cliffrose (Cowania mexicana), Apacheplume (Fallugia paradoxa), Pigmy sagebrush (Artemisia pygmaea).<sup>6</sup>

<sup>5</sup>Alternate nursery or transplant stock: Squawbush (Rhus trilobata), Blue elderberry (Sambucus cerulea), Green Mormon-tea (Ephedra viridis), Nevada Mormon-tea (Ephedra nevadensis), Spineless hopsage (Grayia brandegei).

<sup>6</sup>This species should not be covered. It should be hydrosprayed in the seed mix slurry or broadcast over the surface after drilling or covering of other seed and before application of mulch.

Table 1. Revegetation prescription for disturbed areas within the SAGEBRUSH/GRASS ecosystem in the COLD DESERT ecological association.

Plant Material	Pounds of Pure Live Seed/Acre
<b>GRASS SPECIES<sup>2</sup></b>	
Western wheatgrass ( <u>Agropyron smithii</u> )	1.0
Intermediate wheatgrass ( <u>Agropyron intermedium</u> )	1.0
Pubescent wheatgrass ( <u>Agropyron intermedium trichophorum</u> )	1.0
Sand dropseed ( <u>Sporobolus cryptandrus</u> )	1.0
Bottlebrush squirreltail ( <u>Sitanion hystrix</u> )	0.5
Indian ricegrass ( <u>Stipa hymenoides</u> )	0.5
Needlethread grass ( <u>Stipa comata</u> )	1.0
<b>FORB SPECIES<sup>3</sup></b>	
Alfalfa ( <u>Medicago sativa</u> )	1.0 (Ladak, Nomad or Spreader)
Small burnet ( <u>Sanguisorba minor</u> )	1.0
Gooseberry leaf globe mallow ( <u>Sphaeralcea grossulariifolia</u> )	0.5
Palmer penstemon ( <u>Penstemon palmeri</u> )	0.5
Lewis flax ( <u>Linum lewisii</u> )	1.0
Yellow sweetclover ( <u>Mellilotus officinalis</u> )	0.25
Winged buckwheat ( <u>Eriogonum alatum</u> )	
<b>SHRUB AND TREE SPECIES<sup>4</sup></b>	
Fourwing saltbush ( <u>Atriplex canescens</u> )	2.0
Winterfat ( <u>Eurotia lanata</u> )	0.5
White rubber rabbitbush ( <u>Chrysothamnus nauseosus hololeucus</u> ) <sup>6</sup>	1.0
Black sagebrush ( <u>Aremisia arbuscula nova</u> ) <sup>6</sup>	0.5 (20% purity)
Basin big sagebrush ( <u>Artemisia tridentata tridentata</u> ) <sup>6</sup>	0.5 (20% purity)
Total	<u>15.75</u>

**NURSERY OR TRANSPLANT STOCK<sup>5</sup>**

Fourwing saltbush ( <u>Atriplex canescens</u> )	Plant 454 of each
Mexican cliffrose ( <u>Purshia mexicana</u> )	species per acre.
Spiny hopsage ( <u>Grayia spinosa</u> )	Random placement
Longflower snowberry ( <u>Symphoricarpos longiflorus</u> )	should be 4 feet
Apacheplume ( <u>Fallugia paradoxa</u> )	apart to reach a
	goal of 2,722 stems/
	acre.

<sup>1</sup>Note attachment: Recommended guidelines for seedbed preparation and planting techniques in the COLD DESERT ecological association.

<sup>2</sup>Alternate grass species: Thickspike wheatgrass (Agropyron desvatachyum), Alkalisacaton (Sporobolus airoides), Spike dropseed (Sporobolus contractus), Palute orchardgrass (Dactylis glomerata), Russian wildrye (Elymus junceus), Galleta (Hilaria jamesii).

<sup>3</sup>Alternate forb species: Redstem filaree (Erodium cicutarium), Scarlet globemallow (Sphaeralcea coccinea), American vetch (Vicia americana), Showy goldeneye (Helicomeris multiflora), Creeping penstemon (Penstemon linarioides).

<sup>4</sup>Alternate nursery or transplant stock: Gardner saltbush (Atriplex gardneri), Mexican cliffrose (Cowania mexicana), Apacheplume (Fallugia paradoxa), Wyoming big sagebrush (Artemisia tridentata wyomingensis).

<sup>5</sup>Alternate nursery or transplant stock: Squawbush (Rhus trilobata), Green Mormon-tea (Ephedra viridis), Nevada Mormon-tea (Ephedra nevadensis), Spineless hopsage (Grayia brandegei).

<sup>6</sup>This species should not be covered. It should be hydrosprayed in the seed mix slurry or broadcast over the surface after drilling or covering of other seeds and before application of mulch.

STATE OF UTAH  
Division of Oil, Gas and Mining  
Oil and Gas Inspection Record

Operator: Range Land Petroleum API No.: 43-025-11036  
Well Name: W-T State 2 # 1 B Field: \_\_\_\_\_  
Sec/Twp/Rng: 2 / 40 S / 7 E  
County: Kane

Well Status: P. A.

Type of

Inspection: Routine ~~Drilling~~ ~~Workover~~ ~~Completion~~ ~~Plugging~~  
reclamation

Comments: An onsite inspection was conducted  
on 3/5/97 to check final reclamation.

In attendance were D. Jarvis, B. Hill - DOGM.  
Jim Cooper - SITA, Jim Madsen. - consultant.  
sight has been reclaimed. and recentered.  
Vegetation is coming back. P. A. marker in place.

NFIN.

D. Jarvis 3-5-97

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*          TRANSACTION REPORT          *
*                                                                 *
*          JUN-10-98 TUE 02:44 PM    *
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*          SEND (M)                   *
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*          DATE  START  RECEIVER      TX TIME PAGES TYPE      NOTE      M# DP *
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**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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Executive Director  
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**UTAH DIVISION OF OIL, GAS AND MINING  
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MESSAGES:

\*OPERATOR REQUEST FOR BOND RELEASE; I HAVE NOTIFIED RANGELAND PETRO. CORP.  
THAT THEIR REQUEST FOR BOND RELEASE WAS BEING SENT TO SITLA. (SEE ATTACHED)

Important: This message is intended for the use of the individual or entity of which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return this original message to us at the above address via regular postal service. Thank you.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

1. Type of Well: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER:		5. Lease Designation and Serial Number: ML-45294
2. Name of Operator: Rangeland Petroleum Corporation		6. If Indian, Allocated or Tribe Name: N/A
3. Address and Telephone Number: 210 N. Main Street, Midland, Texas 79701-- 915/686-8983		7. Unit Agreement Name: N/A
4. Location of Well Footages: 1988' FNL & 1983' FWL County: Kane QQ, Sec., T., R., M.: SENW Sec 2-40S-7E State: Utah		8. Well Name and Number: W-T State "2" #1-B
		9. API Well Number: 43-025-11036
		10. Field and Pool, or Wildcat: Wildcat

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

NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandon <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input type="checkbox"/> Multiple Completion <input type="checkbox"/> Other _____  Approximate date work will start _____	<input type="checkbox"/> Abandon * <input type="checkbox"/> Repair Casing <input type="checkbox"/> Change of Plans <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Fracture Treat or Acidize <input checked="" type="checkbox"/> Other <u>Bond release request</u>  Date of work completion <u>N/A</u>  Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form. * Must be accompanied by a cement verification report.
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recomplete <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Reperforate <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off

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

The W-T State "2" #1-B was P&A'd as a dry hole on 3/19/96. The location reclamation work was completed in September, 1997.

Rangeland hereby requests a release of the the well bond for the W-T State "2" #1B.

13.  
Name & Signature: Jerry W. Michael / J.W. Michael Title: President Date: 5/15/98

(This space for State use only)

