Scout Report sent out	☑
Noted in the NID File	☐
Location map pinned	☑
Approval or Disapproval Letter	☑
Date Completed, P. & A. or operations suspended	12-11-59
Pin changed on location map	☐
Affidavit and Record of A & P	☐
Water Shut-Off Test	☐
Gas-Oil Ratio Test	☐
Well Log Filed	☑

* 1-11-62, As of Nov. 1961, This well was connected to gas line.

6-19-70 Approval given to Gas Producing Enterprises to deepen well to 10,000'.

FILE NOTATIONS

Entered in N I D File	✓	Checked by Chief	
Entered on S R Sheet	✓	Copy N I D to Field Office	✓
Location Map Pinned	✓	Approval Letter	✓
Card Indexed	✓	Disapproval Letter	
I W R for State or Fee Land			

COMPLETION DATA:

Date Well Completed	Shut in	Location Inspected	
OW	WW	TA	Bond released
GW ✓	OS	PA	State of Fee Land

LOGS FILED Well History

Driller's Log 12/24/59

Electric Logs (No.) 5

E | I | E-I ✓ | GR | GR-N | Micro ✓

Lat | Mi-L | Sonic ✓ | Others Radio Active Tracer Log, Gamma Ray-Neutron

Form 9-331a
(Feb. 1951)

		0
	23	

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease No. U-0577
Unit Ute Trail Unit
Uintah Co., Utah

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	X	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)

Oral permission granted 5-11-59
by Mr. Russell & Mr. Larson May 11, 1959

Well No. 5 is located 660 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 23

NE NE 23 (¼ Sec. and Sec. No.) T-9-S, R-20-E (Twp.) (Range) SLM (Meridian)

Wildcat (Field) Uintah (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 4850 ft. Estimated

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)

Estimated Formation Tops:

Spud in Uintah fm.
Green River 1810'
Wasatch 5150'
T. D. 7000±

Surface Csg: Set 250' of 13-3/8", 48#, J-55 csg with 210 sxs cement

Production Csg: Set 6500' of 5-1/2", 17# & 15.5# N-80 & J-55 csg. with 200 sxs cement.

1. Propose to use water for drilling to 3000' then convert to aquagel & chemicals.
2. Will core and test as conditions warrant.
3. Will perforate and frac as conditions warrant.

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

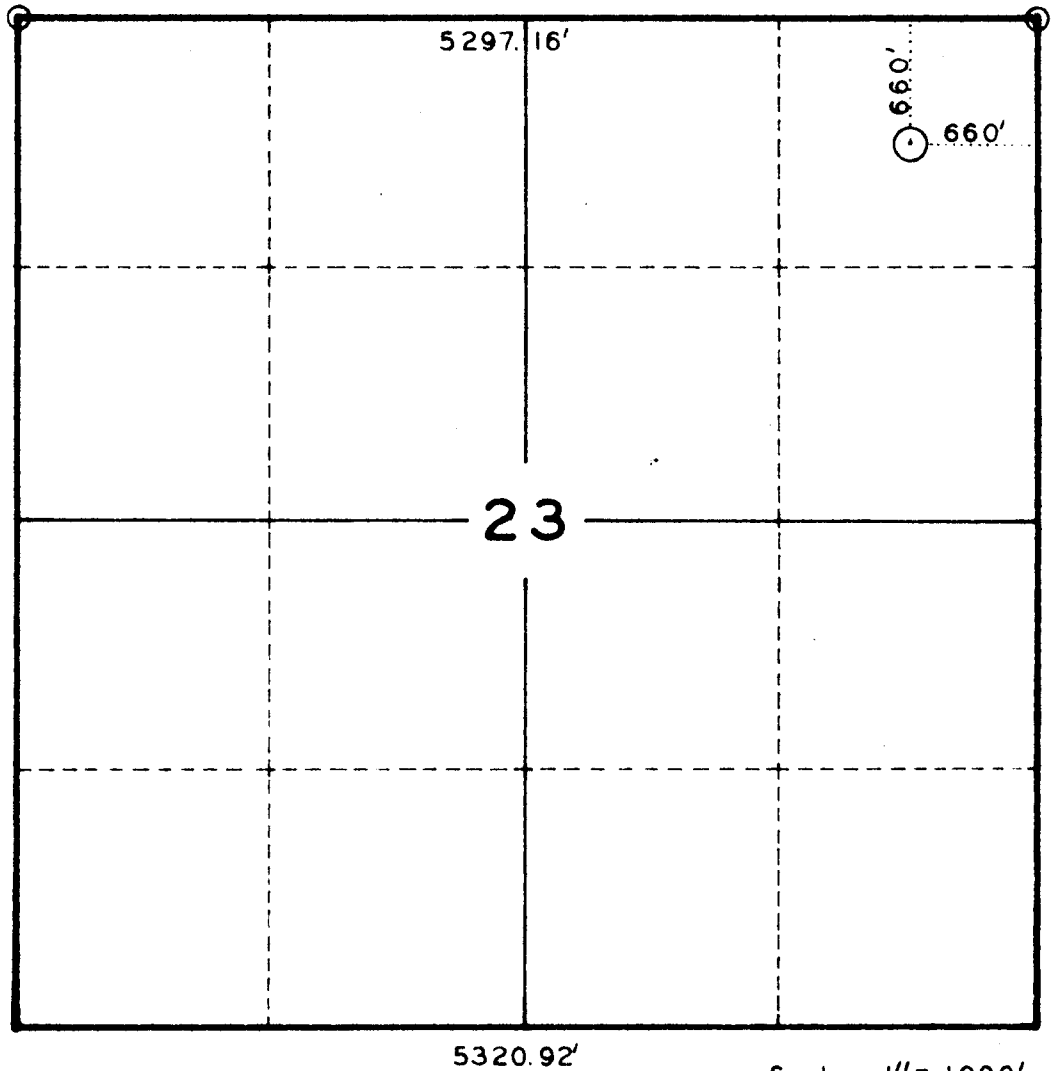
Company DeKalb Agricultural Association, Inc.

Address Box 523
Vernal, Utah

M. C. Johnson
By M. C. Johnson

Title Geologist

T 9 S, R 20 E



Scale: 1" = 1000'

O - Corners located (Stone)

By: ROSS CONSTRUCTION CO.
Vernal, Utah

R. D. Ross

DEKALB

Agricultural Association, Inc.
COMMERCIAL PRODUCERS AND DISTRIBUTORS OF AGRICULTURAL PRODUCTS

U. S. Oil Division
P. O. BOX 523
VERNAL, UTAH
TELEPHONE 1073

July 2, 1959

The State of Utah
Oil and Gas Conservation Commission
310 Newhouse Building
Salt Lake City 11, Utah

RE: DeKalb-Sun # 5 - Ute Trail Unit
Uintah County, Utah

Gentlemen:

Enclosed herewith please find two copies of the "Notice of Intention to Drill" the above referred to well forwarded to you for your approval.

Also enclosed please find a certified plat of the well location.

Yours very truly,

DEKALB AGRICULTURAL ASSN., INC.
U. S. Oil Division

M. C. Johnson

M. C. Johnson
Geologist

MCJ/cc
Encl.

Form 9-331a
(Feb. 1951)

Approval expires 12-31-60.

			X
		23	

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease No. U-0577
Unit DEKALB- SUN # 5
UTE TRAIL UNIT

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	
NOTICE OF INTENTION TO ABANDON WELL			

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

July 16, 1959

Well No. 5 is located 660 ft. from {N} line and 660 ft. from {E} line of sec. 23

NE/4 NE/4 Sec. 23, T-9-S, R-20-E S. L. M.
(¼ Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Wildcat Uintah Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4890 ft. Est.

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)

Ran 10 Jts. 13-3/8" O. D., 48#, J-55 casing that measured 304.69', set at 315' Cemented with 325 sacks regular cement, plus 2% Calcium Chloride. Plug down 1:30 P. M., July 13, 1959. Cement circulated to surface. Wait on cement 48 hours. Tested casing to 1,000 psi for 30 minutes, no indication of pressure drop. Resumed drilling.

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

Company DEKALB AGRICULTURAL ASSN., INC.

Address P. O. Box 923
Vernal, Utah

By [signature]

Title Production Supt.

Budget Bureau No. 42-R356.5
Approval expires 12-31-60.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake City
LEASE NUMBER
UNIT UTE TRAIL UNIT
Uintah County, Utah

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Uintah Field Wildcat

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

Agent's address Box 523
Vernal, Utah

Company DERALD AGRICULTURAL ASSN., INC.
Signed
Agent's title Vice-President & Manager

Phone 1073

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)
NENE 8	10-S	22-E	1	-0-	-0-	-0-	-0-	-0-	-0-	Shut in for pressure Build up. Last test est. 1 million Cu. Ft. Gas per day.
NENE 17	10S	22E	2	-0-	-0-	-0-	-0-	-0-	-0-	Temporarily Abandoned
NENE 16	10S	22E	3	-0-	-0-	-0-	-0-	-0-	-0-	Drilling in Shale at 2007'
NENE 27	9S	20E	4	-0-	-0-	-0-	-0-	-0-	-0-	Blowing and Testing after Frac. Est. of 200,000 Cu. Ft. Gas per day
NENE 23	9S	20E	5	-0-	-0-	-0-	-0-	-0-	-0-	Drilling in Hard Rocky Lime at 3352'

NOTE.—There were No runs or sales of oil; None M cu. ft. of gas sold;
None 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.

Form 9-329
(January 1950)

16—25766-8 U. S. GOVERNMENT PRINTING OFFICE

FEDERAL LAND

CONDITIONS OF APPROVAL

1. The lessee or operator shall mark the derrick or well in a conspicuous place with the name of the operator, well number, the land office and serial number of the lease, and location of the well and shall take all necessary precautions to preserve these markings.

2. A conductor or surface string of casing shall be run and cemented from bottom to surface unless other procedure is expressly authorized by this approval. The conductor or surface string shall be of sufficient weight and length and have installed thereon the proper and necessary high pressure fittings and equipment to keep the well under control in case an unexpected flow of gas, oil or water is encountered.

3. All showings of oil or gas are to be adequately tested for their commercial possibilities. All showings shall be properly protected by mud, cement, or casing so that each showing will be confined to its original stratum. Necessary precautions shall be taken to prevent waste or damage to other minerals drilled through and the U. S. Geological Survey, upon request, shall be furnished with carefully taken samples of such minerals as coal, potash, and salt.

4. Lessee's Monthly Report of Operations (Form 9-329) shall be filed in duplicate with the office of U. S. Geological Survey, P. O. Box 400, Casper, Wyoming, not later than the sixth of the succeeding month. The report should show for this well any change of status occurring within the particular month such as date drilling commenced, suspended, resumed or completed, total depth as of the end of the month, and if shut down the reason therefor.

5. Two copies of the log of this well on Form 9-330, or other acceptable form and when available two copies of all electrical logs, directional, diameter and temperature surveys of the hole shall be filed with the district engineer within 15 days after such information is received by operator on completion of the well whichever is earlier.

6. The District Engineer, _____, shall be notified on Form 9-331a in triplicate giving thereon all necessary details of the proposed operation or test for proper consideration and action sufficiently in advance of making casing or formation tests, shooting or acidizing, running or cementing casing, other than the surface or conductor string, to permit approval of the notice prior to date of proposed work.

U-0577

MAY 19 1959

D. F. Russell

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake City
LEASE NUMBER Ute Trail Unit
UNIT

FEB 1 1959

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Uintah Field Wildcat

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

Agent's address Box 523
Vernal, Utah
Phone 1073

Company DEKALB AGRICULTURAL ASSN., INC.
Signed
Agent's title Production Supt.

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)
NENE 8	10S	22E	1	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 17	10S	22E	2	-0-	-0-	-0-	-0-	-0-	-0-	Abandoned
NENE 16	10S	22E	3	-0-	-0-	-0-	-0-	-0-	-0-	Total Depth 5499' Ran 5-1/2" Casing set at 5498'. Perforated 4 Shots per Ft. 5195' to 5213', fraced w 240 bbls Diesel -1/2# Sand per Gal. Perforated 2 shots per Ft. 4832' to 4850'. Fraced with 620 bbls Diesel Oil, 23,000# Sand. Now testing, est. of 9 Million Cu. Ft. Gas per Day.
NENE 27	9S	20E	4	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 23	9S	20E	5	-0-	-0-	-0-	-0-	-0-	-0-	Running Casing Total Depth 6510' Ran Electric Logs.

NOTE.—There were No runs or sales of oil; None M cu. ft. of gas sold; None 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

Form 9-331a
(Feb. 1951)

Approval expires 12-31-60.

Land Office Salt Lake City
Lease No. U-0577
Unit DeKalb- Sun # 5
Ute Trail Unit

(SUBMIT IN TRIPLICATE)

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	X
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)

September 2, 19 59

Well No. 5 is located 660 ft. from {N} line and 660 ft. from {E} line of sec. 23

NE/4 NE/4 Section 23 (¼ Sec. and Sec. No.) T-9-S (Twp.) R-20-E (Range) S. L. M. (Meridian)

Wildcat (Field) Uintah (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 4835' ft. G. L.

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)

Total Depth 6510'. Ran Electric Logs- Induction, Sonic Gamma Ray, and Microlog. Ran 200 Jts. N-80 & J-55, Rg. 2, 8RLS Casing, 7" set at 6508' with two stage collar at 3906', cemented first stage with 800 sacks regular cement plus 2% Ca, cement bridged or flash set leaving 2180 feet cement inside casing. Opened two stage collar circulated 2 hours, cemented 2nd stage with 500 sacks regular cement plus 2% CC. Plug Down @ 7:00 P. M., 8-31-59. Will drill out cement and run Density Survey to Determine Tops of Cement. Will perforate and Frac intervals to be determined later.

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

Company DEKALB AGRICULTURAL ASSN., INC.

Address BOX 523
VERNAL, UTAH

By J. R. Ray

Title Production Supt.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake City
LEASE NUMBER
UNIT Ute Trail Unit

U. S. GEOLOGICAL SURVEY RECEIVED OCT 5 - 1959 OIL & GAS BR. SALT LAKE CITY, UTAH

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* Uintah *Field* Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of September, *19* 59,

Agent's address Box 523
Vernal, Utah

Company DeKalb Agricultural Assn., Inc.

Signed J. R. Ray

Phone 1073

Agent's title Production Supt.

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)
NENE 8	10S	22E	1	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 17	10S	22E	2	-0-	-0-	-0-	-0-	-0-	-0-	Abandonec
NENE 16	10S	22E	3	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 27	9S	20E	4	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 23	9S	20E	5	-0-	-0-	-0-	-0-	-0-	-0-	Perforated and Fracec Testing after frac, Xmas Tree installed Will Shut Well In.
NENE 24	9S	20E	6	-0-	-0-	-0-	-0-	-0-	-0-	Drilling at 5546' Shale
NWNW 22	10S	22E	8	-0-	-0-	-0-	-0-	-0-	-0-	Drilling at 1296' Shale

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

Form 9-331a
(Feb. 1951)

Approval expires 12-31-60.

			X
	23		

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease No. U-0577
Unit DeKalb-Sun #5
Ute Trail Unit

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	X
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)

September 28, 1959

Well No. 5 is located 660 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 23

NE NE Sec. 23 (¼ Sec. and Sec. No.) T-9-S (Twp.), R-20-E (Range) SLM (Meridian)

Wildcat (Field) Uintah (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 4846 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)

Total Depth 6510'. Top of cement 3900', Drilled out to 6473', Ran Gama Ray Neutron Log, Perforated 2 Jet shots per foot 6233' to 6263'. Fraced with 13,860 Gallon #2 diesel oil, 22,000# Sand, 1650# Adomite down casing packer set at 6200', fraced at rate of 35 bbls per minute flush with 300 bbls Salt water at 33-1/3 bbls per minute Max. Pressure 3900#, minute 3600#, SIP 1550# 5 minute SIP 1500#, 15 minute SIP 1400#. Installed Xmas Tree. Tested est. of 1-1/4 Million Cu. Ft. of Gas per day.

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

Company DeKalb Agricultural Association, Inc.

Address P. O. Box 523

Vernal, Utah

By J. R. Ray

Title Production Superintendent

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake City
LEASE NUMBER
UNIT Ute Trail Unit

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* Uintah *Field* Wildcat

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

Agent's address Box 523
Vernal, Utah

Company DeKalb Agricultural Assn., Inc.

Signed [signature]

Phone 1073

Agent's title Manager and Vice President

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)
NENE 8	10S	22E	1	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 17	10S	22E	2	-0-	-0-	-0-	-0-	-0-	-0-	Abandoned
NENE 16	10S	22E	3	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 27	9S	20E	4	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 23	9S	20E	5	-0-	-0-	-0-	-0-	-0-	-0-	Still Testing after re-perforating zone 6230 to 6260, fraced with 1,000 Gal. Salt Water, 75,000# Sand.
NENE 24	9S	20E	6	-0-	-0-	-0-	-0-	-0-	-0-	Totdal Depth - 6505' Waiting on Work-Over Rig to Complete.
NENE 4	10S	22E	7	-0-	-0-	-0-	-0-	-0-	-0-	Total depth- 5510', Ran 5-1/2" Casing, Now W. O. C.
NWNW 22	10S	22E	8	-0-	-0-	-0-	-0-	-0-	-0-	Testing After Frac. Making Est. of 1 Million Cu. Ft. Gas per day.

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

Form 9-331a
(Feb. 1951)

Approval expires 12-31-60.

			X
	23		

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease No. U-0577
Unit DEKALB- SUN # 5
UTE TRAIL UNIT

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	X
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 10, 1959

Well No. 5 is located 660 ft. from {N} line and 660 ft. from {E} line of sec. 23

NE/4 NE/4 Section 23, (¼ Sec. and Sec. No.) T-9-S, (Twp.) R-20-E (Range) S. L. M. (Meridian)

Wildcat (Field) Uintah (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 4836 ft. G. L.

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)

10-20-59: Cont'd. Fraced 40 bbls at 1# sand per Gallon, 200 Bbls 1-1/4# sand per gallon, 40 bbls flush, 30 bbls break down. Average Injection rate 10 bbls per min. 4900# Maximum, 4500# min. 2100# Shut in. Shut in over night.
10-21-59: Opened to test, died in 15 min. started swabbing, recovered 165 bbls load water, slight amount of gas.
10-24-59: Set Retrievable bridge plug at 6300'.
10-25-59: Abrasijet at 6248' and 6255', with 9,000# sand and Fresh water. Displaced with Salt Water. Fraced with 300 Bbls. Salt Water, 16,000# Sand. Max. Pres. 4900#, Min. Pres. 4450#, Shut In pres. 1800#. Average injection rate 10 Bbls. per minute. Swabbing and testing for several days.
10-29-59: Preparing to Abrasijet Zone from 6230' to 6260'.

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

Company DEKALB AGRICULTURAL ASSN., INC.

Address Box 523
Vernal, Utah

By J K Ray

Title Production Supt.

Form 9-331a
(Feb. 1951)

Approval expires 12-31-60.

Land Office Salt Lake City
Lease No. U-0577
Unit DEKALB- SUN # 5
UTE TRAIL UNIT

			X
	23		

(SUBMIT IN TRIPLICATE)

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	
NOTICE OF INTENTION TO ABANDON WELL			

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

November 10, 19 59

Well No. 5 is located 660 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 23

NE/4 NW/4 Section 23 (¼ Sec. and Sec. No.) T-9-S, (Twp.) R-20-E (Range) S. L. M. (Meridian)

Wildcat (Field) Uintah (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 4846 ft. G. L.

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)

9-29-59: Flowed and tested for several days found well to have an emulsion block. Spotte 1,000 Gal. Low Surface Tension Acid on perforations and in formation. Swabbed out and spotted emulsion breaker. Let set and started swabbing. Recovered oily water and very small amount of gas.
10-1-59: Pulled tubing, circulated sand out from below perforations. Washed down 57' below Packer set at 6200'. Re-run Packer. Ran McCullough tracer to find out what happene to the fluid. Found fluid going through perforations (6233-6263') and up behind casing 25'. Swabbed back water that was put in hole to run Tracer. Shut in until 10-13-59.
10-14-59: Drilled out Model D. Baker Packer, went in hole to test perforations with Retrievable Packer. Pulled Retrievable Packer. Spotted 62 sacks radio active cement in Channel. Drilled out cement. Ran Gamma Ray Log found interval 6200 to 6300 feet cemented with radio active cement.
10-20-59: Abrasijet zone 6368' to 6388'. Fraced with 310 bbls fluid, 16,000# Sand. Cont'

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

Company DEKALB AGRICULTURAL ASSN., INC.

Address BOX 523
Vernal, Utah

By [signature]

Title Production Supt.

Form 9-331a
(Feb. 1951)

Approval expires 12-31-60.

		x
	23	

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease No. U-0577
Unit DeKalb-Sun # 5
Ute Trail Unit

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	x
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 13, 1959

Well No. 5 is located 660 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 23

NE NE Sec. 23 (¼ Sec. and Sec. No.) T-9-S, R-20-E (Twp.) (Range) SLM (Meridian)

Wildcat (Field) Uintah (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 4847 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)

10-30-59: Abrasijet zone from 6230' to 6260' (6238',6243',6248', 6255' & 6260') with 11,000# Sand. Fraced down casing with 500 gallon mud Acid, 1,056 gallon J-94 FLA, 590 bbls Salt Water 250 bbls flush, 76,000# Sand. Average injection rate 42 bbls per minute. Max. treating Pressure 3800#, Min. 2000#, Immediate Shut In 3200#, 10 minute shut in 1700#. Shut in over night.
11-1-59-11-12-59: Flowing to clean up. Making an estimate of 3 million Cu. Ft. of gas per day. Shut In.

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

Company DeKalb Agricultural Assn., Inc.

Address P. O. Box 523
Vernal, Utah

By Paul Pugh

Title Manager

Budget Bureau No. 42-R356.5.
Approval expires 12-31-60.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE Salt Lake City
LEASE NUMBER
UNIT Ute Trail Unit

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* Uintah *Field* Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of November, *19* 59,

Agent's address Box 523
Vernal, Utah

Company DeKalb Agricultural Assn., Inc.

Signed Paul Pugh

Phone 1073

Agent's title Manager

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)
NENE 8	10-S	22E	1	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 17	10S	22E	2	-0-	-0-	-0-	-0-	-0-	-0-	Abandoned
NENE 16	10S	22E	3	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 27	9S	20E	4	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 23	9S	20E	5	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 24	9S	20E	6	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NENE 4	10S	22E	7	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.
NWNW 22	10S	22E	8	-0-	-0-	-0-	-0-	-0-	-0-	Shut In.

DEC 3 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.

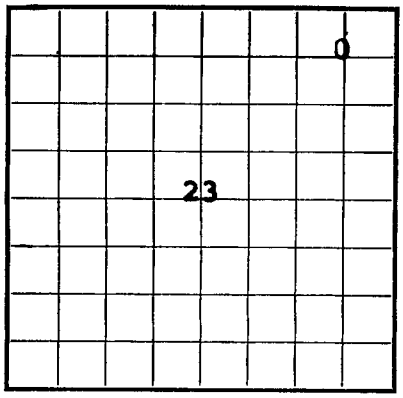
Form 9-329
(January 1950)

16—25766-8 U. S. GOVERNMENT PRINTING OFFICE

Form 9-330

Budg Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Salt Lake City
SERIAL NUMBER U-0577
LEASE OR PERMIT TO PROSPECT
DeKalb-Sun # 5
Ute Trail Unit



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company DeKalb Agricultural Assn., Inc. Address Box 823, Vernal, Utah

Lessor or Tract Ute Trail Unit Field Wildcat State Utah

Well No. 5 Sec. 23 T. 9S R. 20E Meridian S.L.M. County Uintah

Location 660 ft. {N./S.} of N Line and 660 ft. {E./W.} of E Line of Section 23 Elevation 4847 'DF
(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.

Signed M. C. Johnson

Date December 12, 1959 Title Geologist

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

Commenced drilling July 10, 1959 Finished drilling August 31, 1959

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 3280 to 3420' G No. 4, from to

No. 2, from 6090 to 6180' G No. 5, from to

No. 3, from 6230 to 6270' G No. 6, from to

IMPORTANT WATER SANDS

No. 1, from 4065 to 4093' 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 From—	Perforated To—	Purpose
13-3/8"	48#	8rnd	J-55	315	Open				Surface
7"	23#	8rnd	N-80 & J-55	6508	Howco		6238 6373	6260 6383	Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8"	315'	325 sxs reg 2%CC	Pump & Plug	Water	Hole Full
7"	6508'	800 sxs reg 2%CC	Pump & Plug	10.9#	Hole Full

Bridge Plug ---- Length ---- Depth set 6267

Adapters—Material ---- Size ----

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
.75"	Jet	80 gram chrg.	2/ft.	9/19/59	6233-6263	Squeezed off
Irreg.	Dowell	Abrasijet	3/5ft.	10/20/59	6273-6383	6445'
Irreg.	Dowell	Abrasijet	3/5ft.	10/30/59	6238-6260	

TOOLS USED

Rotary tools were used from 0 feet to 6510 feet, and from ---- feet to ---- feet

Cable tools were used from ---- feet to ---- feet, and from ---- feet to ---- feet

DATES

December 11, 1959 Put to producing Shut in for Market, 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 1.5 MMCFGPD Gallons gasoline per 1,000 cu. ft. of gas ----

Rock pressure, lbs. per sq. in. 3400 PSI

EMPLOYEES

Theo Pollock Pusher, Driller XXXX Ernest Pearson, Driller

George Piper, Driller T. O. Green, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION	
				Log Tops:
0	1740'	1740'	Uintah Formation	Surface
1740	5153'	3413'	Green River	1740'
3153	6510'	3357'	Wasatch	5153'
			T. D. 6510'	

FROM—	TO—	TOTAL FEET	FORMATION

[OVER]

16—43094-4

FORMATION RECORD—Continued

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

1. A Baker bridge plug was set at 6287' to shut off lower water saturated Wasatch sands.

2. a. Drilled with water from surface to 3304'.
   b. Drilled with mud from 3304 to 4204'.
   c. Drilled with gasiated water 4204 to 5684'.
   d. Drilled with mud from 5684 to 6510'.

3. Squeezed 6233 to 6263 with 62 sacks radio active treated cement.

DEKALB

Petroleum Corporation

U. S. Oil Division

P. O. BOX 523
VERNAL, UTAH
TELEPHONE 1073

December 22, 1959

State of Utah
Oil & Gas Commission
310 Newhouse Building
Salt Lake City, Utah

Gentlemen:

Please find enclosed for your files a copy of the Log of Oil or Gas Well on our Ute Trail # 5 and # 8 located in Uintah County, Utah.

Yours very truly,

DEKALB AGRICULTURAL ASSN., INC.
U. S. Oil Division

M. C. Johnson

M. C. Johnson
Geologist

MCJ/dc
Encl.

WELL HISTORY

DEKALB SUN
#5 UTE TRAIL UNIT
NE NE 23, T-9-S, R-20-E
UINTAH CO., UTAH

11-2-59	Tubing Pressure at 6:00 A. M. - 1375#, CP 1375#. Open well flowing by heads, start swabbing, shut down at 6:00 P. M. Recover 800 bbls. of 1200 bbl. load.
11-3-59	Tubing Pressure at 6:00 A. M. 1550#. Well start flowing by head, no gauges on recovery and pressures.
11-4-59	Rigging work-over unit down. Well flowing estimate of 1,500,000 CFGD with small slugs and heavy spray frac water and approximately 2% diesel oil with condensate odor.
11-5-59	Moved Work-over rig to Ute # 6. Continute to test # 5 and Shut In.

10-26-59 6:00 A. M. well still flowing very weak, recovered 76 bbls. frac water (4:00 P. M. to 6:00 A. M) 14 hours, start swabbing, swab all day, making 2 bbls frac fluid per hour, shut down 5:00 P. M.

10-27-59 Open well at 6:00 A. M., TP- 500#, blew down immediately, start swabbing well making considerable sand and very little gas, swab off bottom til 9:00 A. M., swab sanded down and stuck, pulled on sand line and worked swab, trying to get loose, pulled line into a at top of sinker bar, start out of hole with tubing at 4:00 P. M. Pulled 40 stands, shut down 6:00 P.M.

10-28-59 Start work at 6:00 A. M., finish coming out of hole with tubing to recover swab, out at 10:30 A. M., rig up and go in hole with Dowell 3 stage Abrasi-jet Tool and Baker Retreiving head, on bottom, in hole at 12:30 P. M. Prepare to Abrasijet zone, mix salt, hook up tanks, lines, etc. Shut down at 6:00 P. M.

10-29-59 Start work at 6:00 A. M., washing and circulating approx. 100' sand out of hole, finish cleaning hole at 12:30 A. M., Dowell, start abrasijet zone 6238' to 6260'. Set Jet tool at 6260', 1st stage 6243' second stage 6238', third stage. Job complete at 2:32 P. M. Used 11,000# sand with fresh water. Come out of hole with Abrasijet Tool, out at 8:00 P. M. Go inhole with tubing and Baker setting and retreiving tool, on bottom of tubing, in hole at 11:30 P. M. Close BOP pipe rams, install valves on tubing, prepare to Frac.

10-30-59 All Dowell equipment arrive on location at 7:30 A. M., hook up and spot 500 gallon mud acid across perforations. Come out of hole with tubing, out at 11:30 A. M. Dowell hook up for casing frac, hook up complete at 2:00 P. M. Start break down, all trucks pumping 40 bbls per minute, stop break down, Dowell mix J-94 in frac water, start frac down casing at 3:08 P. M. with 4 Allisons and 2# Sand per Gallon. Increase sand to 2# per gallon, increase sand to 3# per gallon. Max. Treating Pressure 3000#, Min. Treating Pressure 2850#, Max. Injection rate 44.1 bbls. per minute. Min. Injection rate 35.9 bbls. per minute, Average Injection rate 38.5 bbls. per minute. Immed. Shut In Pressure 3200#, 5 Minute Shut In pressure 1800#, 10 Min. Shut In Pressure 1700#. Treatment complete at 3:46 P. M. Used 76,000# Sand, 990 Barrels Salt Water with Sand, 1056 Barrels J-94, 500 Gallons Mud Acid, 250 Barrels Flush. Shut well in til next A. M.

10-31-59 6:00 A. M., well head Pressure 2425#, trying to install Xmas Tree. Rig up lubricator on top of BOP with Do-Nut attached to Cameron Back Pressure Valve Tool. Open casing valve start well to flowing thru casing valve pressure coming down. Pressure reach 1400#, open blind Rams, lubbricate Do-Nut to seat, tighten studs, insert back pressure valve, remove BOP install Xmas Tree. Start well flowing at 12:30 P. M. Will flow all night.

11-1-59 Well flowed all night made 280 bbls frac water. Slowed down to small stream, go in hole with Halliburton wire line measuring 220' sand in hole. Go in with tubing, open ended, circulate 220' sand out of hole start swabbing.
Shut down at 6:00 P. M.

Dowell connections, pressure tubing to 4600# psi, formation break 4600# to 2100#, start frac 1# sand per gal. pump 40 bbls, increase sand to 1-1/2# per gal. Finish Frac (200 Bbls.) at 1-1/2# sand per gal. Flush with 40 bbls. treatment complete at2:25 P. M. Fill and Break Down 30 Barrels. Maximum treating Pressure 4900#, psi at 9 bbls per minutes. Minimum Treating Pressure 4500# psi at 10 bbls. per minute. Used 280 bbls salt water and 9,000# Sand. Average 1-1/4# sand and 10 bbls per minute injection rate.
Immediate Shut In Pressure 2100#, 15 Minute Shut In pressure 1700#, Leave well shut in overnight.

10-21-59 Open well at 6:00 A. M., T. P. 700#, flowed 2 hours, slowed down, start swabbing at 8:00 A. M., swab til 6:00 P. M., made small amount of gas, approximately 100,000 CFGD, and 2 bbls. water per hour when shut in at 6:00 P. M. Recover 165 bbls frac fluid, some sand. Will leave shut in Overnight.

10-22-59 Open well at 6:00 A. M. T. P. 550#, would not flow, start swabbing, swab well til 6:00 P. M., Shut in overnight, will pull tubing and prepare to perforate another zone.

10-23-59 Start work at 6:00 A. M., release Packer, circulate hole with salt water, out of hole with Packer at 12:30 P. M., make up and go in hole with Baker Retrievable Bridge Plug, made up on Dowell Abrasijet tool with setting tool attached to Abrasive Jet Tool. Set Bridge Plug at 6287', finish at 4:00 P. M. Hook up water pumps, line, etc. Preparing to Abrasive Jet, perforate zone 6248' to 6255', shut down at 6:00 P. M. Dowell arrive on location 4:30 P. M., hook up lines, trucks, etc.

10-24-59 Start work at 6:00 A. M., Dowell, Inc., Abrasijet with 3 Stage Tool, first stage at 6255', second stage at 6248', 3rd stage at 6241'. Jet with fresh water. Recover cement, formation while circulating sand out. Circulate hole with salt water after Abrasijet job. Job complete at 10:05 A. M. Used 9000# Sand, come out of hole with Abrasijet tool, out at 2:00 P. M., go inhole with Baker full bore Packer. In hole at 4:30 P. M., Mix Salt.

10-25-59 Start work at 6:00 A. M., wash and circulate 10' sand from hole, Dowell, Inc. spot 250 gal mud acid. Set Packer at 6193', break down with 1 Allison 4500# psi to 3400# psi, start sand at 1# per gal. Increase to 1-1/2# per gal. Pressure increase from 3300# to 3700#, cut sand back to 1# sand per gal, sand screen out, treating pressure went to 5000# had 4000# sand in formation and tubing, try release to packer and pump in formation. Could not shut down reverse, excess and kut with rig pump, clean hole, set Packer hook up Dowell lines, pressure tubing to 4800# formation taking fluid at 10 bbls per minute, start sand at 1/2# per gallon. Treating Pressure 4650#, increase sand to 3/4# per gallong, treating pressure 4500# increase sand to 1# per gallon, treating pressure 4450#, increase sand to 1-1/4# per gallon. Used 250 gal, mud acid, 16,000# Sand and 300 bbls. salt water plus 45 bbls flush, average 1# Sand per gallon. Max. Treating pressure 4800# psi, Min. Treating Pressure 4450#, Average Injection rate 10.5 bbls per minute. Immediate Shut In pressure 1800#, 20 Minute Shut In Pressure 1650# psi, job complete at 10:31 A. M. Open well at 4:00 P. M. T. P. 1125#, flowing into mixing tank.

10-7-59	Swabbing water from hole that was used to run Tracer Survey, swabbed hole dry and shut in at 12 Noon.
10-8-59	Shut in
10-9-59	Shut In, build up to 2200# psi, tubing pressure.
10-10-59	Shut In, Build up to 2550# psi Tubing Pressure.
10-11-59	Shut In, build up to 2550# psi Tubing Pressure.
10-12-59	Open wel, blew down and died, remove Xmas Tree, install BOP, come out of hole with tubing, preparing to drill out Baker Model D. Packer, mixing salt and laying lines from mud tanks to well and manifold.
10-13-59	Start work at 7:00 A. M., pick up drill collars, Baker milling tool, go in hole, mill from 11:30 A. M. til 4:00 P. M., mill thru Packer, coming out of hole and mixing 130 sacks salt. Preparing to Squeeze perforations with (light Squeeze).
10-14-59	Go in hole with Baker full bore retreivable Packer on 2-1/2" tubing, set packer, set above perforations. Pressure casing to 3000# psi, casing ok. Halliburton spot 75 sacks regular cement mixed with radio active material, below packer, slow down pumps, got 2500# Squeeze leaving 13 sacks in casing or 62 sacks in formation. Finish squeeze at 6:00 P. M., leave 2500# psi on tubing and let set til next morning.
10-15-59	Start out of hole with Baker Retrievable Packer at 6:00 A. M., out at 11:00 A. M., left 2 joints tubing and packer in hole, start back in hole with overshot at 2:00 P. M. on bottom at 4:00 P. M., caught fish, out of hole with Packer at 6:00 P. M, Shut down.
10-16-59	Start in hole with 6-1/8" Bit at 6:00 A. M., in hole at 8:30 A. M., Hook up lines displace hole with clear fresh water. Drilling out cement shut down at 6:00 P. M.
10-17-59	Start Work at 6:00 A. M., finish drilling out cement at 1:30 P. M., circulate and clean hole out of hole at 6:00 P. M., lay down drill collars Rig up McCullough, run Radio Active Tracer, found Radio active cement and was as should be in perforations up behind casing and out in shale section.
10-18-59	Start work at 6:00 A. M., Rig up drilling line with jars and Baker Scraper go in hole, clean and scrape to bottom, come out, going in hole with Dowell Abrasive Jet tool. In hole at 2:30 P. M., laying lines, rigging up to Abrasive Jet. Shut down at 6:00 P. M.
10-19-59	Start Abrasive Jet at 6:00 A. M., Perforate with 3 stage tool at 6373', 6378', 6383'. Finish jetting, circulate sand out of hole, come out, mix salt and prepare to Frac.
10-20-59	Start in hole at 6:00 A. M. with Baker full Bore Packer on tubing, wash and circulate sand out to 50' below 6383', spot 250 gal. mud acid across perforations, pull tubing and packer back to 6340', set Packer, hook up

9-26-59	Flowed well 24 hours through 1/2" Choke, had 500# back pressure at well head 6:00 A. M., making very little frac oil and approx. 1 MM CFGD. Will flow all night.
9-27-59	Well flowing contineously for 40 hours, open to 3/8" choke at 6:00 P. M. last night, had 200# back pressure at well head and approx. 750,00 CFGD with 1/2 to 3/4 barrels diesel oil per hour. Flow til 3:00 P. M., shut in had 200# back pressure on 3/8" Choke.
9-28-59	Open well at 7:00 A. M. with 500# tubing pressure, blew down and died. Call Dowell, Inc. out to wash perforations with 1,000 gal. mud acid. Dowell ready at 11:00 A. M., start mud acid via tubing at 12 noon, spot mud acid and pump slowly in formation, flush with fresh water for this reason. Diesel oil recovered from well had emulsion. Dowell, Inc., ran lab test found chemical W17 mixed with fresh water was ideal breaker order 1,000 Gal. and put in well job finished at 9:30 P. M. Shut well in at 1600# after flush. Leave well shut in til 12 noon, (Recommended by Dowell). Open at 12 noon would not flow, start swabbing with 500' oily water in hole, small amount of gas. Well down looks like complete emulsion block shut in at 4:00 P. M.
9-30-59	Swabbed well 6:00 A. M. to 9:00 A. M., dry tubing call Halliburton and ran wire line measuring line tagged bo tom at 6209' appears to have sand fill up above Packer. (21')
10-1-59	Come out of hole with tubing out at 2:00 P. M., break off Baker Stinger pick up 2 joints special made 2" tuging (To go through Baker Model D Packer) Mixed salt going in to circulate sand, washed and circulated to 57' below packer, did not recover any sand found some salt could have been sheath on casing under Packer.
10-2-59	Finish Circulating and cleaning hole come out with tubing, go in hole with Baker Stinger on 2-1/2" tubing, remove BOP, hook up well head, start swabbing , swab well down to 400' fluid in hole.
10-3-59	Making approx. 10,000 CFGD and 1/2 to 3/4 bbls fluid, making 1 run per hour from 12 noon to 5:00 P. M. Making 1 run every 2 hours from 5:00 P. M. to midnight.
10-4-59	Swab well 1 run every 2 hours, 12 midnight to 7:00 A. M., in tank. Then turn to seperator 7:00 A. M. to 12 noon. Making est. 100,000 CFGD with 400' fluid in hole. Preparing to wash formation with emulsion breaker and gasoline.
10-5-59	Swabbing well 12 midnight to 10:00 A. M. Run measuring line 10:00 A. M. to 4:00 P. M. (No fill up under Packer) Had some trouble getting wire line Plumb Bob back thru Packer. Crew mixed 220 sacks salt taking hourly shut in pressure on well, would not build up very fast. Shut in at 6:00 P. M.
10-6-59	Open well 6:00 A. M., run swab, hole dry, no gas, no build up. Halliburton fill hole with salt water and spot radio active material in formation. McCullough run tracer log found frac went in at perforations 6233-6263', then channel up behind pipe 25' and out in shale. Finish Tracer Survey at 6:00 P. M. Release pressure swabbing hole down, mix salt.

9-18-59 Finish drilling out cement to 6473', circulate and clean up hole to run cement logs and displace with diesel oil, lay down drill collards, changing blow out preventers at 12 midnight.

9-19-59 Install Hydralic operated BOP on well, hooked to accumulator controls, lay lines, rig up pump to mix salt, rig up mud tanks, pressure up and test BOP rig up 7" Lubricator, mixed salt hooke up separator on Blowde Line. McCullough run cement log and corratating log, prepare to perforate.

9-20-59 McCullough perforate 2 hole per foot with Super Formation Jets 6233' to 6263', crew lay down lubricator, finish making salt, land De-Nut, rig up to frac with Dowell down casing. Dowell rig up trucks could not break formation, pressured up formation to 4500# psi, rig Dowell down, rig up McCullough, run and set Baker Model D. Packer at 6199'. Go in hole with 2-1/2" tubing, set stinger in Packer hook up well head, prepare to frac down 2-1/2" Tubing.

9-21-59 Unit and crew stand by 12 midnight to 6:00 A. M., wait for Dowell, rig up Dowell, Dowell pressure formation to 6200# psi, formation broke back to 5400# psi, run 2 allisons full throttle, Injection rate 10.5 bpm, shut down pressure bleed in formation to 1900# psi, pull tubing out of Backer Packer hook up casing, start pumping down casing with two Allison pumps 17 bbls. per minute, down casing at 3000# psi. Shut down order 2 more Allisons come out of hole with tubing, prepare to frac down casing. Dowell will return next morning to frac as other two trucks not available until then. Rig crew come out of hole with tubing land De-Nut, clean location, stand by wait on Dowell.

9-22-59 at 7:00 A.M. Dowell ready to frac down casing, pressure annulus to 3900# psi, with all pumps, start sand at ~~[illegible]~~ per gal. Pressure drop to 3000#, psi, increase sand to 1-1/2 # per Gal., increase sand to 2# per Gal., flush with salt water. Job complete at 7:48 A. M. Injected 13,860 Gal. No. 2 Diesel Oil with 22,000# Sand and 1650# Adomite at average of 35 bbls per minute. Flush with salt water at average of 33.3 bbls. per minute. Maximum pressure 3900#, Min. 2600#, immediate Shut In. 1550#, psi. 5 minute - 1500# psi. Open well head valves clapper in Model D. Baker held. Goin hole with tubing, landed De-Nut at 1:30 P. M. Remove BOP install Xmas Tree. Leave well shut in taking hourly gauges.

9-23-59 Well Shut in 12 midnight to 6:00 A. M., open at 6:00 A. M., tubing pressure 1150# psi, Flowing salt water (Flush), diesel oil. Making small heads of gas. Release workover rig 12 noon. Flowed well all day at end of 12 hours making approx. 1-1/4 mm CFGD and 1 bbl. diesel oil per hour. Shut in overnite.

9-24-59 Open well at 6:40 A. M. Tubing Pressure 2570#, psi, flow on 1/2" choke, end of 1/2 hour making 3,500,000 CFGD with 500# back pressure at well head. flowed well all day. Shut # 5 in at 5:00 P. M., flow on 3/4" choke making 1,125,000 CFGD, recovered 5 barrels desel oil in emulsified form.

9-25-59 Open well 6:00 A. M. Tubing Pressure 2375# psi, flowed well 12 hours thru 1/4" choke with 675# back pressure at well, making approximately 1 MM CFGD and very little diesel oil at end of 12 hours. Will flow all night.

Leave Packer set 30' above D. V. Collar all night, located leak at D. V. collar too small to Squeeze.

9-7-59 Come out of hole with 2-1/2" tubing and Baker Packer out at 11:00 A. M. Start rigging up to drill cement with dry gas, shut down at 7:00 P. M.

9-8-59 Start in hole with 6-1/8" Bit and 8-3/4" D. C. at 7:00 A. M., in hole at 2:30 P. M. (Blow hole dry with gas every 10 stands) start drilling cement at 12 noon with Power Swivel, having trouble with motor and power unit on Power Swivel. Start working 24 hours per day.

9-9-59 Drilling cement 12 midnight to 5:00 A. M., repair Power Swivel 5:00 A. M. to 8:00 A. M. Drilling cement 8:00 A. M. to 12 noon. Start rigging down Power Swivel at 12 noon, and rig up Reverse circulation equipment finish at 6:00 P. M., drill cement til 12 midnight.

9-10-59 12 midnight bit balling up trying to dry hole by circulating with gas 12 midnight to 2:00 A. M. Drilling 2:00 A. M. to 3:00 A. M., bit balling up drying hole 3:00 A. M. to 7:00 A. M. Rig up to drill with gas and water. 7:00 A. M. to 12 noon, drill with gas and water 12 noon to 12 midnight. (Lay gas line to pump, motor 1 hour 6 to 7 P. M.

9-11-59 Drilling cement 12 midnight to 8:30 A. M., drill to 4709', circulate and clean bit in hole 8:30 A. M. to 10:00 A. M. Drilling cement til 6:30 P. M. making connections, pipe stuck 4805', working drill pipe (2-1/2" tubing) 6:30 P. M. to 12 midnight.

9-12-59 Working stuck pipe 12 midnight to 7:00 A. M., rig up Dowell, Inc. and broke circulation 7:00 A. M. to 7@30 A. M., to spot acid, finish spotting 250 Gal acid at 10:00 A. M., Shut well in.

9-13-59 Worked stuck pipe from 12 midnight to 7:00 A. M., MCcullogh Tool Co. run Magna-tector, could not get to stuck point, rig up and run string shot to 4809' shoot. Did not come loose, ran another to 4779', shoot and drill collars backed off, come out of hole with tubing, coming out at 12 midnight.

9-14-59 Out of hole at 3:00 A. M., leave 2 drill collars to fish, rig up, go in hole with Jars and Bumper, sub caught fish circulated with water, jarred fish loose, start out of hole at 12 noon, out with fish at 2:30 P. M. Back in hole with 6-1/8" Bit at 9:00 P. m. hook up rotating head, wash to bottom at 9:00 P. M. Drilling cement at midnight at 5040'.

9-15-59 12 midnight to 5:00 A. M. drilling, 5:00 A. M. to 7:30 A. M. trying to fee plugged bit, trip, out at 1:00 P. M. with plugged bit, lay down bottom collar back in hole with 6-1/8" bit, wash to bottom at 9:30 P. M., drilling at 12 midnight at 5225'.

9-16-59 Drilling cement with gas and water 12 midnight to 12 noon, 5225' to 5495'. Drilling cement with gas and water 12 noon to 12 midnight 5495' to 5767'.

9-17-59 Drilling cement with gas and water 12 midnight to 12 noon 5767' to 6102'. Drilling cement with gas and water 12 noon to 12 midnight 6102' to 6404'.

8-30-59	Drilling with mud, Wt. 10.8, Vis. 50, Ck. 2/32, Wl. 7.5
6490-6506'	Morning Tour, 16', 6490' to 6506' Sand and Shale.
Total Depth	Day Tour, logging
Correction	Evening Tour, logging
6510'	Drill til 4:00 A. M., circulate hole 2 hours, strap drill pipe out, out of hole at 8:45 A. M. had 4' correction, Total Depth 6510'. Schlumberger start running logs at 9:00 A. M., ran IES, Sonic, Gamma Ray, Microlog. Finish logging at 7:00 P. M., pick up and lay down drill collars, lay down core barrel, break out kelly, hook up, fill up line, rigging up to run Casing at 12 midnight. Bit No. 50 made 40'- 8-3/4 hours, 6469' to 6506', Sand and Shale.
8-31-59	Running 7" Casing.
6510' T. D.	Start running casing at 12 midnight, finish running casing at 2:15 P. M. circulate 45 minutes, cement 1st stage with 800 sacks, regular Type 1, cement plus 2% Ce, circulate through D. V. Collar 2 hours, cement 2nd stage with 500 sacks, regular Type 1, cement plus 2% Cal. Ch. second stage plug down at 7:00 P. M. Ran 200 Joints 23#, N-80, J-55, SMLS. Casing, set at 6508' with 2 stage collar at 3906', cement first stage with 800 sacks regular cement plus 2% Ca. Cl., cement bridge or flash set leaving 2180' cement inside casing. Opened 2nd stage tool, circulate 4 hours, cemented 2nd stage with 500 sacks regular cement plus 2% Cal. Ch., plug down at 7:00 P. M. Start laying down drill pipe in mouse hole.
9-1-59	Preparing to drill out Cement. laying down drill pipe in mouse hole til 8:00 A. M., clan pits, strip BOP, etc from cellar, rig up to lay down drill pipe, finish laying down drill pipe at 8:30 P. M., start picking up 2-1/2" tubing with 4-3/4" drill collars at 11:00 P. M.
9-2-59	Preparing and Drilling out Cement. Going in hole with 2-1/2" tubing and 6-1/8" Bit, hit first plug (DV Collar) with 2-1/" Tubing and 6-1/8" Bit at 8:00 A. M. Drill D. V. Collar fall through to top of cement at 4,000' start drilling cement (Reverse Circ.) at 10:00 A. M., still drilling at 12 midnight. Drilled from 4000' to 4165'.
9-3-59	Drilling Cement. Drill cement from 12 midnight to 7:00 A. M. (Drill to 4298') circulate hole 1 hour, start laying down tubing at 8:15 A. M., out of hole at 1:00 P. M., release rig, began rigging down moving rig off hole. Preparing to rig up work-over rig to finish drilling cement.
9-4-59	Rigging down Rotary Rig., 15 man - 8 hours each.
9-5-59	Finish rigging down Rotary Rig. Moving work-over rig in and rigging up, set unit, raised derrick install BOP start nippling up.
9-6-59	Preparing to drill cement with work-over unit start in hole with Baker Packer to try locate appearent hole in 7" casing as gas coming up through water in 7" casing. Go in hole set Baker Packer at various places and HalliburtON Pressure up could not pump in formation as hole in casing too small. Shut down at 7:00 P. M.

Out of hole at 12 midnight. Bit No. 46 made 123'- 193/4 Hours, 6140' to 6263', Sand and Shale.

8-26-59
6263-6351'

Drillinglwith mud, Wt. 10.7, Vis. 54, Ck. 2/32, Wl. 7.5, PH 11.2.
Morning Tour, 19' - 6263' to 6282' Sand and Shale.
Day Tour, 43' - 6282' to 6325' Sand and Shale.
Evening Tour, 23' - 6325' to 6351' Sand and Shale.
Finish trip break out DST tools load out, back in hole with 8/3/4" YSI, Bit No. 47 at 3:30 A. M. Drill til 9:30 R. M., survey and trip, coming out of hole at 12 midnight. (200' Gas and watery mud). Morning Tour used 14# Soda Ash, 50# Q-Broxin, 30# Caustic. Day Tour used 30# Caustic, 15# Soda Ash, 50# Driscose, Evening Hour used 10 sacks Magcobar, 30# Caustic, 15# Soda Ash, 50# Q-Broxin. Bit No. 47 made 88'- 17-3/4 hours, 6263' to 6351', Sand and Shale.

8-27-59
6351-6391'
DST # 5

Drilling with mud, Wt. 10.8, Vis. 54, Ck. 2/32, Wl. 7.5, Ph.
Morning Tour 34'- 6351' to 6385', Sand and Shale.
Day Tour, 6', 6385' to 6391' Sand and Shale.
Evening Tour, DST # 5
Finish trip, back in hole with 8-3/4" OWV Bit No. 48 at 1:45 A. M., drill to 6366' at 4:00 A. M., circulate samples til 5:00 A. M., drill to 6371' at 5:15 A. M., circulate samples til 6:00 A. M., drill til 8:00 A. M. circulate samples til 10:00 A. M., drill til 10:30 A. M., circulate samples til 11:30 A. M., trip out pick up DST tools, back in hole with DST at 4:15 P. M., Drill stem test No. 5, Zone 6360' to 6391'. I Shut In 30 Minutes, Tool open 1 hour, Shut In 30 minutes, trip out, pull 37 stands. Found mud approximately 4330', wet packer failed # 14 drill collar leaking will re-test. 50# Q-Broxin, 15# Soad Ash, 30# Caustic.

8-28-59
6391-6411'
DST # 5

Drilling with mud, Wt. 10.8, Vis. 49, Ck. 2/32, Wl. 7.4, Ph. 11.4.
Morning Tour, 2' - 6391 to 6393' Sand, Shale, Condition Hole.
Day Tour, Retest DST # 5
Evening Tour, 18', 6393' to 6411', Sand and Shale.
Trip in with 8-3/4" Bit No. 44 - Re-Run, on bottom at 1:00 A. M., wash to bottom and circulate, make 2', circulate mkd condition hole til 5:00 A. M., trip out, make up DST, go in hole on bottom at 11:00 A. M. Retest DST # 5, Zone 6360' to 6393'. IM SI - 30 minutes, tool open 21 minutes, F SIP 30 Minutes, Packer Failed, no test. Trip out break down and load DST tools, trip in back on bottom with 8-3/4" M4N Bit No. 49 at 7:00 Pl M. circulate 1/2 hour, start drilling at 7:30 P. M., still drilling at 12 midnight. 15 Sacks Magcobar, 30# Caustic, 15# Soda Ash, 50# Q-Broxin, Bit No. 48 made 40' - 5 hours, 6351' to 6391', Sand and Shale.

8-29-59
6411-6490'

Drilling with mud, wt. 10.8, Vis. 52, Ck. 2/32, Wl. 7.6, Ph. 11.5.
Morning Tour, 34'- 6411' to 6445', Sand and Shale.
Day Tour, 24', 6445' - 6469' Sand and Shale.
Evening Tour, 22'- 6469' to 6490' Sand and Shale.
Drill til 1:30 P. M., trip, back in hole with 8-3/4" YSI Bit No. 50 at 6:45 P. M., still drilling at midnight, 10 sacks Magcobel, 30# Caustic, 10# Soda Ash, 50# Q-Broxin, 50# Driscose, Bit No. 49 made 76'- 19 hours, 6393' to 6468', Sand and Shale.

hours, 5790' to 5898' Sand and Shale. 10 Sacks Magcobar, 50# Alkatan 20 Sacks Magcobar, 6 sacks Alkatan.

8-22-59
5964-6060'

Drilling with mud, Wt. 10.5, Vis. 50, Ck. 2/32, Wl. 7.9, Ph. 11.5.
Morning Tour, 24'- 5964' to 5988' Sand and Shale.
Day Tour, 31' - 5988' to 6019' Sand and Shale.
Evening Tour, 41' - 6019' to 6060' Sand and Shale.
Drill til 5:00 A. M., Survey and trip, jet shale pit, back in hole with 8-3/4" OWV Bit no. 43 at 9:45 A. M., still drilling at midnight. Morning Tour, used 30 sacks Magcobar, 50# Alkatan, Eve. Tour used 73# Driscose, 50# Alkatan, 56Sacks Magcobar. Bit No. 42 made 90' - 19-1/2 Hours, 5898 to 5988' Sand and Shale.

8-23-59
6060-6135'

Drilling with mud, Wt. 10.8, Vis. 58, Ck. 2/32, Wl. 7.4, Ph-
Morning Tour, 24'- 6060' to 6084' Sand and Shale.
Day Tour, 33'- 6084' to 6117' Sand and Shale.
Evening Tour, 18'- 6117' to 6135' Sand and Shale.
Drill til 5:00 A. M. (Work on pump 1/2 hour 3:30 A/ M. to 4:00 A. M.) Core, trip, back in hole with 8-3/4" Bit No. 44 at 9:30 A. M., drill til 1:15 P. M., circulate hole til 2:45 P. M., trip, pick up core barrel, back in hole with 8-5/8" Christensen Diamond Drilling Co. core barrel, Bit No. 45 at 7:30 P. M., circulate 1/4 hour. Start coring at 6117' still coring at midnight. 40 sacks Magcobar, 50# Alkatan, Bit no. 43 made 96' - 18-3/4 Hours, 5988' to 6084' Sand and Shale. Bit No. 44 made 31' - 3-3/4 Hours, 6084' to 6117' sand and Shale.

8-24-59
6135-6185'
DST # 3

Drilling with mud, Wt. 10.7, Vis. 62, Ck. 2/32, Wl. 7.4, Ph 11.5.
Morning Tour, 5' coring 6135' to 6140'
Day Tour, DST
Evening Tour, 45', 6140' to 6185' Sand and Shale.
Finish coring at 1:00 A. M., trip, recover 23', 100%, 6117' to 6140'. Coring time minutes per foot, 8, 10, 10, 8-1/2, 9, 6, 6, 6, 6, 7, 8, 14, 13, 14, 15, 15, 18, 22, 20, 15, 15, 17, 20, 6140' Total Depth. Prepare for D. S. T. N. 3, back in hole with DST at 8:00 A. M., test Zone 6090' to 6140'. 2 hour test, 30 min. in, 61 min. open, 30 min. Shut In. Immediate blow at end of test, small blow. I Hy. 3428#, F Hy 3396#, I SIP 3095#, IFP 80#, Final FP - 95#, Recovered 100' Gas cut mud, 2250' gas in drill pipe. Not gas to surface F SIP 1473#. Trip out, load DST Tool, back in hole with 8-3/4" YSI Bit No. 46 at 4:15 P. M. Ream core hole, start drilling new formation at 4:30 P. M. Still drilling at midnight. 50# Driscose, 50# Alkatan, Bit No. 45 core made 23'- 5 hours, 6117' to 6140' Sand and Shale.

8-25-59
61858 6263'
DST # 4

Drilling with mud, Wt. 10.7, Vis. 55, Ck. 2/32, Wl. 7.4, Ph.
Morning Tour, 42' - 6185' to 6227' Sand and Shale.
Day Tour, 36'- 6227' to 6223', Sand and Shale.
Evening Tour, DST # 4.
Drill til 8:30 A. M., circulate samples, 8:30 A. M. to 10:00 A. M. Drill 10:00 A. M. to 10:30 A. M., circulate samples 10:30 A. M. to 11:00 A. M. Drill 11:00 A. M. to 11:45 A. M., Circulate samples 11:45 A. M. to 12 noon Drill 12 noon to 2:00 P. M., circulate 2:00 P. M. to 2:30 P. M., trip, for DST # 4. Prepare Dst back in hole with DST 7:30 P. M., test zone 6226' to 6263'. Tool open 2 hours, gas to surface 4 minutes, est. 510,000 CFGD End of 15 min. est. 245,000 CFGD. End of 1 hour Est. 235,000 CFGD. I Hy-3536#, F Hy 3456#, I SIP 30 Minutes, 3283", F SIP 2919#, IF 129#, FF 132#.

8-16-59
5302-5684'

Drilling with Gas and Water.
Morning Tour, 100' 5302' to 5402', Sand and Shale.
Day Tour, 220', 5402' to 5622' Sand and Shale.
Evening Tour, 62', 5622' to 5684' Sand and Shale.
Finish trip out, servie rig, install new float back in hole with 8-3/4" M4N Bit No. 38 at 4:00 A. M. Wash 100' to bottom start drilling at 4:00 A. M., drill til 7:00 P. M., circulate 3/4 hour, trip, 10:30 P. M. to 12 midnight. Lay down block slip and cut drilling line. Used 24 sacks Lime, Bit No. 38 made 382' - 14-1/2 Hours, 5302' to 5684' Sand and Shale.

8-17-59
5684' TD

Drilling with Gas and Water.
Start trip in at 12 midnight, hit bridge 2:30 A. M., at 5244' (TD 5684')
Washing to bottom 2:30 A. M. to 5:00 A. M., hole heaving cannot wash to bottom with gas and water, circulating 5:00 A. M. til 7:00 A. M., come out of hole to mud up. Out of hole at 9:00 A. M., clean mud tanks, mix mud start in hole at 6:30 P. M., start displacing with mud. Hole displaced at 8:30 P. M. Start nippling up to drill with mud. Nippled up and hole displaced at 8:30 P. M. Startout of hole at 11:00 P. M. 75 sacks Gel, 280 sacks Magcobar, 4 sacks Q-Broxin, 50# Driscose, 2 sacks Soda Ash, 1 sack Alkatan, 3 sacks Caustic, 100# Tannathin.

8-18-59
5684' TD

Drilling with mud, Wt. 10.6, Vis. 65, Ck. 2/32, WL. 7.8, PH. 11.5.
Finish trip out at 2:00 A. M., remove Rotary Table, lay down rotating head, top half of QRC BOP install Hydrill, start nippling up, finish nippling up at 10:00 A. M., Start in hole with 8-3/4" M4N Bit No. 39 (re-run) at 10:00 A. M., hit bridge at 12 noon, wash and drill to bottom and condition mud til 12 midnight. 91 sacks Gel, 1 sack Soda Ash.

8-19-59
5684-5763'

Drilling with mud, wt. 10.9, Vis. 65, ck. 2/32, Wl. 7.2, Ph 11.
Morning Tour, 27'- 5684' to 5711' Sand and Shale.
Day Tour, 15'- 5711' to 5726', Sand and Shale.
Evening Tour, 37'- 5726' to 5763', Sand and Shale.
Finish washing and drilling to bottom at 1:00 A. M., drill new formation til 6:30 A. M., trip, back in hole with 8-3/4" YSI Bit No. 40 at 10:30 A. M. Circulate and wash 20' to bottom start drilling at 12:30 P. M., installing 4" valve in mud line 1 hour, still drilling at 12 midnight. 10 Sacks Gel. 100# Alkatan, 100# Driscose, Bit No. 39 made 27' - 11-1/2 hours, 5684' to 5711', Sand and Shale.

8-20-59
5763-5871'

Drilling with mud, Wt. 10.6, Vis. 64, Ck. 2/32, WL. 7.2, Ph. 10.
Morning Tour, 27'- 5763' to 5790', Sand and Shale.
Day Tour, 30'- 5790' to 5820', Sand and Shale.
Evening Tour, 51'- 5820' to 5871', Sand and Shale.
Drill til 5:15 A. M., Survey and trip, strap drill pipe out, back in hole with 8-3/4" YSI Bit No. 41 at 10:15 A. M., drill til 7:00 P. M. Had 10' drilling break at 5839' to 5849' (No gas kick) still drilling at midnight, 20 sacks Magcobar, Morning Tour, 30 sacks Magcobar Day Tour, 10 sacks Magcobar, 15 sacks Gel, evening Tour, Bit No. 40 made 79' in 17-3/4 hours, 5711-5790', Sand and Shale.

8-21-59
5871-5964'

Drilling with mud, Wt. 10.5, Vis. 62, Ck. 2/32, WL. 7, Ph-/
Morning Tour, 27'- 5871' to 5898' Sand and Shale.
Day Tour, 31' - 5898' to 5929', Sand and Shale.
Evening Tour, 35'- 5929' to 5964', Sand and Shale.
Drill til 5:00 A. M., trip, back in hole with 8-3/4" YSI Bit No. 42 at 9:15 A. M., still drilling at 12 midnight. Bit No. 41 made 108' - 18-3/4

8-10-59 4199-4204' Prepare to Gas Drill	Drilling with mud, change over to drill with Gas and Water, drill til 12:45 A. M., Survey and Trip, set out Rotary Table, remove Hydril, install BOP, rig up to drill with gas, clean mud pits, hook up BOP. Nippling up, reset Rotary Beams, install Rotary Table, pack swivel, hook up gas drilling lines. Rigging up for Gas Drilling, preparing to run Schlumberger. Survey at 4200' - 1 Degree, Bit No. 33 made 87'- 15-1/4 hours, 4117' to 4204'.
8-11-59 Rigging up to gas drill	Preparing to drill with Gas and Water. 24 hours Rigging up.
8-12-59 4204-4398'	Preparing to drill with Gas and Water. Morning Tour, Rigging up, trip in, install Rotating head. Day Tour, 105', 4204' to 4309', Sand and Shale. Evening Tour, 89', 4309' to 4398' Sand and Shale. Finish Rigging up at 5:00 A. M., going in hole with 8-3/4" Bit No. 34, install Rotating head, start displacing mud out of hole at 9:30 A. M. Work on Rotary Table 1 hour, finish displacing at 11:00 A. M. Start drilling, drilling and gas freezing up, no gas at all at 9:00 P. M. to 10:00 P. M., trip coming out of hole at 12 midnight. Used 52 sacks lime.
8-13-59 4398-4660'	Drilling with Gas and Water. Morning Tour, 0' Day Tour, 34'- 4398' to 4432' Sand and Shale. Evening Tour, 228'- 4432' to 4660' Sand and Shale. Finish trip out, waiting on gas heater, gas freezing off at gas well, well headhooking motors to butane, installing gas heater at gas well. Start in hole at 10:30 A. M., in hole with 8-3/4" Reed YSI Bit No. 35 at 1:00 P.M. Still drilling at 12 midnight (Lost 1 hour minor repairs) Mixed 14 sacks Lime, Bit No. 34 made 194' - 8-3/4" , in 8-3/4 hours, 4204' to 4398' Sand and Shale.
8-14-59 4660-5036'	Drilling with Gas and Water. Morning Tour, 29' - 4660' to 4689', Sand and Shale. Day Tour, 232'- 4689' to 4921', Sand and Shale. Evening Tour, 115' - 4921' to 5036', Sand and Shale. Drill til 12:30 A. M., circulate 1/2 hour, trip, repair Air Lines and clutch, back in hole with 8-3/4" MAN Bit No. 36 at 8:15 A. M. Drill til 8:00 P. M., circulate 1/2 hour, trip, out of hole at 10:00 P. M., repair Rotary Table, install seal on drum, 10:00 P. M. til 12 midnight. Used 8 sacks Lime, Bit No. 35 made 280' - 10-1/2 hours, 4398' to 4678', Sand and Shale, Bit No. 36 made 358'- 13 hours, 4678' to 5036' Sand and Shale.
8-15-59 5036-5302'	Drilling with Gas and Water. Morning Tour, 0' Day Tour, 145'- 5036' to 5181', Sand and Shale. Evening Tour, 121', 5181' - 5302' Sand and Shale. 12 midnight to 1:00 A. M., finish repairs, drill pipe float not holding well flowing drilling gas back thru drill pipe, trip, back in hole with 8-3/4" OWV Bit No. 37 at 5:00 A. M., wash 70' to bottom, repair clutch 7:00 A. M. to 9:15 A. M., start drilling at 9:15 A. M. Drill til 10:00 P.M. Circulate 1/2 hour, trip coming out of hole at 12 midnight. 24 Sacks Lime Bit No. 37 made 266' - 12-3/4 hours, 5036' to 5302', Sand and Shale.

Drill til 2:45 A. M., circulate at 3669' til 3:30 A. M., drill til 6:45 A. M. Survey and trip, back in hole with 8-3/4" OWV Bit No. 26 at 11:45 A. M., drill til 8:30 P. M., trip, back in hole with 8-3/4" Security M4L Bit No. 27 at 12 midnight. Survey at 3695' - 1-3/4 Degree. 35# Caustic, 50# Q-Broxin, Bit No. 25 Made 117' in 13-3/4 Hours, 3578' to 3695' Sand and Shale. Bit No. 26 made 64' in 9-3/4 Hours, 3695' to 3759', Sand & Shale.

8-6-59
3759'-3882'

Drilling with mud Wt. 10.9, Vis. 60, Ck. 2/32, WL 8.6, PH 10.
Morning Tour, 48' 3759' to 3807', Sand and Shale.
Day Tour, 30' - 3807' to 3837' Sand Shale and Lime.
Evening Tour, 44', 3837' to 3882', Sand, Shale and Lime.
Drill til 1:00 P. M., Survey and trip, back in hole with 8-3/4" M4L Bit No. 28 at 4:30 P. M., still drilling at 12 midnight. Survey at 3837' 1 Degree, 50# QBroxin, 38 sacks Magcobar, Bit No. 27 made 78'- 13 hours, 3759' to 3837' Shale and Lime.

8-7-59
3882'-3973'

Drilling with mud Wt. 10.8, Vis. 48, Ck. 2/32, WL 8.8, Ph. 9.8
Morning Tour, 19' - 3882' to 3901', Sand, lime and Shale.
Day Tour, 34', 3901' to 3935', Sand and Shale.
Evening Tour, 38', 3935' to 3973', Sand and Shale.
Drill til 2:00 A. M. Survey and trip, back in hole with 8-3/4" M4L Bit No. 29 at 5:30 A. M., drill til 2:15 P. M., Survey, and trip, back in hole with 8-3/4" OWV Bit No. 30 at 5:30 P. M. still drilling at 12 midnight. Survey at 3935' - 1-1/2 Degree, 12 sacks Magcogel, 50# Tanathin, 58 sacks Magcobar, 50# Q-Broxin, 10# Caustic, 15 sacks Magcobar, 10# Caustic, 50# Tannathin, P. M. Bit No. 28 made 54' - 9-1/4 Hours, 3837' to 3891' Sand, Lime and Shale. Bit No. 29 made 43' - 6-3/4 hours, 3891' to 3935', Sand and Shale.

8-8-59
3973-4055'

Drilling with mud, Wt. 10.8, Vis. 44, Ck. 2/32, WL. 9.2, PH 9.5.
Morning Tour, 32'- 3973' to 4005', Sand, Lime and Shale.
Day Tour, 33' - 4005' to 4038', Sand, Lime and Shale.
Evening Tour, 17'- 4038' to 4055', Sand Lime and Shale.
Drill til 6:00 A. M., Survey and trip, back in hole with 8-3/4" OWV Bit No. 31, at 9:30 A. M., drill til 7:00 P. M., trip, back in hole with 8-3/4" Reed YSI Bit No. 32 at 9:45 P. M. Still drilling at 12 midnight. Survey at 4005' - 1-1/2 Degree, 10 sacks Gel, 25 sacks Magcobar, 50# Tannathin, Morn. Tour. 10 Sacks Gel, 20 Saks. Magcobar, 50# Tannathin, 10# Caustic, Day Tour. 8 sacks Gel, 20 Sacks Magcobar, 15# Tannathin, 10# Caustic Evening Tour. Bit No. 30 made 70' - 12-1/2 hours, 3935' to 4005' Sand, Lime and Shale. Bit No. 31 made 50'- 9-1/2 hours, 4005' to4055' Sand and Shale.

8-9-59
4070'-4199'

Drilling with mud Wt. 10.9, Vis. 50, Ck. 2/32, WL. 8.4, PH. 9.5
Morning Tour, 47'- 4070' to 4117' Sand and Shale.
Day Tour, 36'- 4117' to 4153' Sand and Shale.
Evening Tour, 46' - 4153' to 4199', Sand and Shale.
Drill til 6:00 A. M., survey and trip, back in hole with 8-3/4" Reed YSI Bit No. 33 at 9:30 A. M. still drilling at 12 midnight. No records of any mud mixed. Survey at 4117' - 1 Degree, Bit No. 32 made 62' - 8 Hours, 4055' to 4117', Sand and Shale.

8-1-59
3424-3531'

Drilling with mud Wt. 10.7, Vis. 48, Ck 2/32, WL. 8.2, Ph. 9.5
Morning Tour, 29' - 3424' to 3453' Sand, Lime and Shale.
Day Tour, 30' - 3453' to 3483' Sand Lime and Shale.
Evening Tour, 48'- 3483' to 3531', Sand Lime and Shale.
Drill til 5:30 A. M., (Repair Rotary Chain 30 min.) trip, back in hole with 8-3/4" M4L Bit No. 23 at 9:30 A. M. After 1-1/4 hours, minor repairs. Drill til 9:45 A. M., circulate samples from 3531' til 11:00 P. M., survey and trip coming out of hole at 12 midnight. 10 sacks Gel, 30 sacks Magcobar A.M. 10 Sack Gel, 20 Sacks Magcobar, 100# Caustic, 50# Tanathing.
Bit No. 22 made 59'- 16-1/2 hours, 3394' to 3453', Sand, Lime and Shale.

8-2-59
3531-3591'

Drilling with mud Wt. 10.9, Vis. 48, Ck. 2/32, WL. 8.
Morning Tour, 27' - 3531' to 3558' Sandy Shale.
Day Tour, 20' - 3558' to 3578', Sand, Lime and Shale.
Evening Tour, 13' - 3578' to 3591', Sand, Lime and Shale.
Finish trip, minor repairs and fill D. P. 1/2 way in hole. Back in hole with 8-3/4" M4L Bit No. 24 at 3:00 A. M. Drill til 5:15 A. M., repair then replace rotary chain 1-1/2 hours. Serviced rig, back to drilling at 8:15 A. M., drill til 11:30 A. M. Circulate samples from 3578' til 12:30 P. M., trip, prepare for Core # 2 with Christ. Diam. Drilg. Co. Back in hole with core barrel, coring at 5:00 P. M., start core drill at 3578', drill til 9:30 P. M. and to 3591', clutch out on No. 1 Motor, still circulating and repairing clutch at 12 midnight.
20 sacks Magcobar A. M. 30 Sack Magcobar, 50# Tanathin, 30# Caustic P. M.
Bit No. 23 made 78' - 11-1/4 Hours, 3543' to 3531' Sand Lime and Sahel.
Bit No. 24 made 47' - 5-1/4 hours, 3531' to 3578', Sand Lime and Shale.

8-3-59
3591-3591'

Drilling with mud Wt. 10.7, Vis. 50, Ck. 2/32, WL 8.
Finish repairing clutch on # 1 Motor at 2:00 A. M. Start out of hole with core No. 2, recover 100% 13' core (3578' to 3591') 3378'-78.1 SS lt. grey, very fine grain, calc. argell. 78.1-78.6 Shl, grey, green, firm blacky, 78.6 - 80.2 Silt Stn., ss, lt. grey, grey venefonl, gren, very calc. Shaley inclusions, 80.2 - 89 Shale drk green grey, grey, firm calc. 89 - 90 Shale as above with thin ss inclussions. 90-91 shale, grey, dark green grey, fine calc. Start repars on clutch at 5:00 A. M. prepare to D. S. T. # 2. Wait on parts for clutch still waiting at 12 midnight.

8-4-59
3591'-3647'

Drilling with mud, Wt. 10.7, Vis. 47, Ck. 2/32, WL 8.2, Ph. 9.
Start installing clutch parts at 12 midnight, pick up test tool, start in hole at 5:00 A. M. on bottom at 8:00 A. M., drill stem test zone 3505' to 3591'. Anchor 85.96' 2 packers, total tool 121.60' set at 3498' top Packer, 3591' Bottom Packer. On bottom 7:50 A. M., out off hole at 11:15 A. M., I. Hy- 2011.4#, ISI- 1570.8#, IF- 120.2#, FF- 123.3#, FSI - 908.1# F H_y. - 1995.1#. Recovered 110' sl. gas cut mud, with sl. show of rainbow weak to very weak blow thoughout test. Tool open 1 hour. Shut in 30 min. Amount of blow too weak to measure, out of hole with DST No. 2 at 11:15 A. M., Break out load out DST equipment, go in hole with Bit, on bottom with 8-3/4" OWV Bit No. 25 at 4:00 P. M. (Ream core hole 1 hour) Still drilling at 12 mi dnight. 25 sacks Magcobar, 50# QBroxin.

8-5-59
3674'-3759'

Drilling with mud, wt. 10.8, Vis. 48, Ck. 2/32, WL. 8.4, PH 9.8.
Morning Tour, 48' - 3647' to 3695', Sand and Shale.
Day Tour, 31'- 3695' to 3725', Sand and Shale.
Evening Tour, 33' - 3726' to 3759' Sand and Shale.

7-25-59 3308' T.D. Clean up after fire	Circulate hole and condition mud until an auxiliary draw works can be set up to pull drill pipe. Mix mud circulate and condition hole 24 hours, rig down Cardwell work over Unit from Ute Trail Unit Well No. 1, spool off drilling line move to well No. 5.
7-26-59 Wait on new Equp.	Condition mud and circulating hole, rig up Cardwell Unit, call out welder weld lifting sub on broken kelly, pull out broken kelly, clan up burned debris, remove burnked draw works, from Rotary Rig, claning up after fire. Circulating hole and conditioning mud 24 hours.
7-27-59 Installing new Equip.	Circulating hole, condition mud, installing new draw works, move Cardwell Unit away from location.
7-28-59	Installing new draw works and other equipment, reparing floor around Rotary table and draw works.
7-29-59	Rigging up to drill, pick up new Kelly and Rotary Hose, start out of hole with 8-3/4" Bit No. 20 at 3:00 P. M., out at 6:00 P. M., install BOP, pick up core barrel, make up core head and jars. Start in hole at 11:00 P.M.
7-30-59 3308'-3330' Core & DST	Preparing to core Drill and DST. Morning Tour, prepare core, trip in, core 8', 3308' to 3316'. Day Tour, Finish Drilling core, trip out 14', 3316' to 3330'. Evening Tour, D. S. T. # 1 Repair rig 12 midnight to 2:00 A. M., finish trip in, circulate to bottom start coring at 5:00 A. M., out 26', start out at 11:00 A. M., out at 12:30 P. M. recover 100% core, 26' tight limsy oil stained, 5' Green Gray Shale, 6' interbedded Shale and Limestone with tiny vertical fractures, bleeding oil and gas. 3' Limestone oolitic with good porosity, odor. 12' of interbedded shale and dense limestone, limestone containing vertical fractures with good brown oil stain, long vertical fractures places with trace of bleeding gas coring time in min. per ft. 15, 14, 11, 12, 12, 8, 11, 12, 10, 10, 15, 8, 7, 7, 10, 10, 11, 12, 10, 5, 6, 7, 8, 10, 12, 10. Prepare for D. S. T. # 1 Start in hole at 3:00 P. M., test Zone 3283' to 3330'. Gas to surface in 2 minutes, I Hy. 1840.9#, ISI 1679.3#, IF 97.9#, FF 179.3#, FSI 1621.4#, F. Hy. 1823.9#, ISI- 30 Minutes, open 1 hour, 36 Minutes. Shut in 30 minutes. Test - 700,000 CFGD thru 1" Choke, Recovered 180' highly Gas Cut Mud, start in hole with 8-3/4" MY1 Bit No. 21 at 10:00 P. M.
7-31-59 3330'-3424'	Drilling with Mud, Wt. 10.8, Vis. 48 Morning Tour, 22' - 3330' to 3352' Lime. Day Tour, 42' - 3352' to 3394' Lime. Evening Tour, 30'- 3394' to 3424' Lime, Shale and Sand. In hole at 12:30 A. M., break circulation ream, core hole, start new hole at 5:00 A. M., drill til 1:00 P. M., trip, strap drill pipe cout (No. correction) Back in hole with 8-3/4" Reed Bit No. 22 at 7:00 P. M., (Ream 30') Still drilling at 12 middight. 20 sacks Gel, 50 sack Magcabar A. M. 15 Sacks Gel, 50 Sacks Magcabar P. M. Bit # 21 made 86' - 9-1/4 hours, 3308' to 3394' Lime.

drill til 6:00 P. M., trip, back in hole with 8-3/4" OWV Bit No. 14 at 8:00 P. M., still drilling at midnight. Survey at 2000' - 3/4 Degree 2055' - 3/4 Degree, Jet and clean pits. Bit No. 13 made 109' - 10 hours, 1946' to 2055' Sand, Dolomite and Shale.

7-20-59
2092-2336'

Drilling With Water.
Morning Tour, 91' - 2092' to 2183' Sand Sand and Shale.
Day Tour, 107' - 2183' to 2290' Sand and Shale.
Evening Tour, 46' - 2290' to 2336' Sand and Shale.

Drill til 6:30 A. M., trip, back in hole with 8-3/4" M4L Bit No. 15 at 9:00 A. M., drill til 7:45 P. M., repair oil pump, rotary chain, 7:45 P. M. til 10:45 P. M., start out of hole at 10:45 P. M. Bit No. 14 made 128' 10-1/2 hours, 2055' 2183' Sand and Shale. Bit No. 15 made 153' - 10-1/4 hours, 2183' 2336' Sand and Shale.

7-21-59
2336-2636'

Drilling with water.
Morning Tour, 52' - 2336' to 2388' Sand and Shale.
Day Tour, 161' - 2388' to 2549' Sand and Shale.
Evening Tour, 87' - 2549' to 2636' Sand and Shale.
Finish trip out, drain oil, replace oil pump, repair chain, back in hole with 8-3/4" M4L Bit No. 16 at 5:00 A. M. (1 Hour Remm 30') drill til 5:15 P. M., trip, back on bottom with 8-3/4" M4L Bit No. 17 at 8:00 P. M. Still drilling at 12 midnight. Clean shale Pit. Survey at 2336' - 3/4 Degree, 2575' - 3/4 Degree, Bit No. 16 made 239' in 11-1/4 hours, 2336' to 2575', Sand and Shale.

7-22-59
2575-3045'

Drilling with Water.
Records lost in fire.

7-23-59
3045-3308'
Fire

Drilling with Water.
Morning Tour, 159' - 3045' to 3204' Sand and Shale.
Day Tour, 104' - 3204' to 3308' Sand and Shale.
Evening Tour, Fighting Fire.
Drill til 10:00 A. M., trip, back in hole with 8-3/4" Security Bit No. 18 at 12:30 P. M., drill til 2:30 P. M. and depth of 3308', gas blew out, caught fire burned all records, (Note trips do not correspond with bit records on 7-22-59 and 7-23-59), clothes, spare parts, etc. in top dog house, burned and damaged rotary table draw works,kelly and kelly hose, Almost everything on derrick floor. (No estimate of amount of gas escaping from well) All available fire fighting equipment to rig as quick as possible. Daylight drilling crew double over to fight fire, 2 Dowell, Inc. Trucks, 2 Halliburton Trucks, Uintah County Fire Department Trucks, Several Continental Co. men and Trucks. Pump Trucks spraying water on substructure to keep darrick from falling until Halliburton fire fighting equipment arrive from Grand Junction, Colorado. Survey at 3292' -1-1/4 Degree. Fire still burning at 12 midnight. Bit No. 17 made 210'- 10-1/2 Hours, 2575' to 2875' Sand and Shale. Bit No. 18 made 250' - 10 hours, 2875' to 3035' Sand and Shale. Bit No. 19 made 226' - 10-1/2 Hours, 3035' to 3261', Sand and Shale.

7-24-59
3308'
T. D.

Put out fire at approximately 3:00 A. M. Shut down all motors station Guards at well and wait until daylight to kill well order out weight material to mix mud for killing well, mix mud, kill well, mix mud to circulate hole and circulate hole all night.

7-15-59 Morning Tour, W. O. C. and Nippling up.
Daylight Tour, Drill mousehole, etc.
Evening Tour, 303' - 318' 621' Sand and Shale.
Nippling up drilling mouse hole, hook up lines, install BOP, check surface Casing with 1,000# psi, hold 1/2 hour, no pressure drop, start drilling with 8-3/4" OSCIG Bit No. 5 at 4:00 P. M. Still drilling and survey at 12 midnight, found top cement, plug at 285', Survey at 560' - 3/4 Degree.

7-16-59 Drilling with Water.
621'-1452' Morning Tour, 322' - 621' to 943', Sand and Shale.
Daylight Tour, 303'- 943' to 1248' Sand and Shale.
1 Evening Tour, 204' - 1248' to 1452' Sand and Shale.
Drill with Bit No. 5 til 3:30 A. M., trip, survey, back on bottom with 8-3/4" OSCIG Bit No. 6 at 4:30 A. M., drill til 9:45 A. M., trip. Back on bottom with 8-3/4" Security S3 Bit No. 7 at 11:30 A. M, drill til 5:30 P. M., trip, back on bottom with 8-3/4" Security S6 Bit No. 8 at 7:15 P. M. still drilling at 12 midnight. Survey at 733' - 1/4 Degree, 1314' - 1/4 Degree, oil and gas show at 1385', Bit No. 5 made 415' - 11 hours, 318' to 733' Sand and Shale. Bit No. 6 made 333', 5-1/4hours, 733' to 1066', sand and Shale, Bit No. 7 made 248', 5-3/4 hours, 1066' to 1314' Sand and Shale.

7-17-59 Drilling with Water.
1452-1822' Morning Tour, 162' - 1452' to 1614' Sand and Shale.
Day Tour, 121'- 1614' to 1735' Sand and Shale.
Evening Tour, 87' - 1735' to 1822' Sand and Shale.
Start out of hole at 12 midnight back on bottom with 8-3/4" OWV Bit No. 9 at 1:45 A. M., drill til 4:15 P. M., trip, back on bottom with 8-3/4" M4N Bit No. 10 at 6:15 P. M., (Ream 25') still drilling at 12 midnight. Jet and clean pits. Survey at 1455' - 1 Degree, 1550' 1 Degree, 1736' 1 Degree, Bit No. 8 made 141', 5-3/4 hours, 1314' to 1455' Sand and Shale. Bit No. 9 made 281' - 14-1/4 hours, 1455' to 1736' Sand and Shale.

7-18-59 Drilling with Water.
1822-1946' Morning Tour, 68' - 1822' to 1890' Sand and Shale.
Day Tour, 26' - 1890' to 1916' Sand and Shale.
Evening Tour, 30' - 1916' to 1946' Sand and Shale.
Start out of hole at 12:15 A. M., back in hole with 8-3/4" OWV Bit No. 11 at 2:00 A. M. (Ream 15') drill til 7:30 A. M. twisted off at 1890', trip, go in hole with Bowman overshot, fished out drill collars, back in hole at 12:00 Noon, with 8-3/4" M4N Bit No. 12 at 1:30 P. M., (Ream 40') drill til 5:00 P. M., twisted off at 1946', trip, rig up overshot, back in hole at 7:00 P. M., fishing for Drill Collars til 9:00 P. M., trip, dress overshot, back in still fishing at 12 midnight. Did not recover fish. Survey at 1825' - 1 Degree, Bit No. 10 made 89' - 6 hours, 1736' to 1822' Sand and Shale. Bit No. 11 made 68' - 5-1/2 hours, 1822' to 1890' Sand and Shale. Bit No. 12 made 56' - 6 hours, 1890' to 1946' Sand and Shale.

7-19-59 Drilling with Water.
1946-2092' Morning Tour, fishing at 1946' 1 hour, 13' 1946' to 1959' , recovered fish
Day Tour, 77' - 1959' to 2036' Sand, Dolomite and Shale.
Evening Tour, 56'- 2036' to 2092' Sand and Shale.
Finish trip in hole with over shot fish out, drill collars, trip out, lay down drill collars, back in hole with 8-3/4" Security M4L Bit No. 13 at 6:30 A. M., wash and ream to bottom, start drilling at 7:00 A. M., drill

UTE TRAIL UNIT WELL NO. 5

7-7-59	Digging cellar, moving rig, 15 men 8 hours each.
7-8-59	Digging cellar, moving rig, 15 men 8 hours each.
7-9-59	Rigging up, raised derrick, 15 men 8 hours each.
7-10-59 0-30'	Rigging up, start drilling rat hole with compressors using air at 2:00 P. M. Finish rat hole at 10:00 P. M., spud with 12-1/4" Retip OSC Bit No. 1 at 10:00 P. M., 20 sacks Gel.
7-11-59 30-293'	Drilling with water Morning Tour 53' - 30' to 83' Shale. Daylight Tour 108' - 83' to 191' Shale. Evening Tour 202' - 191' to 293' Shale. 12 to 1:00 A. M. Drill to 40' with 12-1/4" Bit. 1 to 2AM Ream to 40' with 17-1/2" Reamer, 2:00 A. M. to 6:00 A. M. drill with 12-1/4" Bit No. 1) (6:00 A. M. to 4:00 P. M. drill with 12-1/4" Bit). Trip, service rig, repair swivel, survey, back on bottom with 12-1/4" OSC3 Bit No. 2 at 8:15 P. M., still drilling at midnight. 25 Sacks Gel, Survey at 168' - 1/4 Degree at 240' - 1/2 Degree, Bit No. 1 made 191' in 13-1/2 hours. 0' to 191' Shale.
7-12-59 293-318' Reaming	Drilling with water. Morning Tour 25' with 12-1/2" Bit 293' to 318' Shale, Ream 17-1/4" 40' to 88' Shale. Day Tour, ream with 17-1/4" Reamer 77'- 88' to 165' Shale. Evening Tour, Ream with 17-1/4" reamer 83'- 165ft to 248' Shale. Drill with 12-1/4" til 4:45 A. M., trip pick up 17-1/2" reamer, back to 40' at 4:00 A. M. Reaming 12-1/4" hole til 5:00 P. M., trip at 181' for new Reed Reamer, back to 181' at 7:00 P. M. (Packed swivel repair stand pipe) ream til midnight, survey at 318' - 1/2 Degree, 25 sacks Gel, Bit No. 2 made 127' 8 hours- 191' to 318' Shale. Bit (Reamer) No. 3 made 181' 12 hours 0 - 181' Shale. 25 Sacks Gel, Vis. 40 to 48.
7-13-59 318' T. D. Run Casing	Drilling with water. Morn Tourn, reaming with 17-1/2" reamer 66' - 248' 314' Shale. Day Tour, reaming and set surface casing Evening Tour, W. O. C. Ream til 9:00 A. M., circulate 1 hour, trip, start running surface casing at 11:00 A. M. Ran 10 joints, plus landing joint, 13-3/8" H-40, 48#, Range 2 casing, measured 322.79', less landing joint 18.10' equals 304.69', set at 315', KDB, cemented with 325 sacks regular cement plus 2% Calcium Chloride. Plug down at 1:30 P. M. Cement Circulated, Bit (Reamer) # 4 made 135' - 15 hours, 181' to 316' Shale.
7-14-59 318' T. D. W. O. C.	W. O. C. Morning Tour, W. O. C. Daylight Tour, W. O. C. and Nippling up. Evening Tour, W. O. C. and Nippling up. W. O. C. til 12 noon start nippling up, still nippling up at 12 midnight.
7-15-59 318-621'	W. O. C. and Drilling with Water.

OPERATOR: DeKalb Agricultural Assn., Inc.

WELL: # 5 Ute Trail Unit

LEASE: U-0577

LOCATION: 1045' FEL, 655' FNL Section 23, T-9-S, R-20-E
Uintah County, Utah

ELEVATION: 4835.26' G. L., 4846.86' K.B.

COMMENCED: July 10, 1959

SET SURFACE: July 13, 1959

REACHED TOTAL DEPTH: August 30, 1959

COMPLETED: December 11, 1959

TOTAL DEPTH: 6510' Driller, 6512' Schlumberger

LITHOLOGY BY: M. C. Johnson

CASING:

Surface: Set 13-3/8", 48#, J-55 Csg. at 315' K.B. with 325 sxs plus 2% Ca Cl.

Production: Set 7", 23#, N-80 and J-55 at 6508' K.B. Two stage collar placed at 3906'. Cemented first stage with 800 sxs plus 2% Ca Cl. Cemented second stage with 500 sxs plus 2% Ca Cl.

PERFORATIONS: 6233 to 6263', with 2 McCullough Super Formation 80 gram jets per foot.
Abrasijeted 3 stages with 3 holes per stage at 6373, 6378, 6383'.
Abrasijeted 3 stages with 3 holes per stage at 6238, 6243, 6248,6255, and 6260'.

PRODUCTION: 1,500 MCFPD

CONTRACTOR: MIRACLE AND WOOSTER DRILLING COMPANY

TYPE RIG: Wilson Giant & Wilson Super Giant

HOLE SIZE: Drilled 12-1/4" hole to 318 then Reamed to 17-1/2" hole.
Drilled 8-3/4" hole from 318 to 6510'.

FORMATION TOPS FROM ELECTRIC LOGS:

Spudded in Uintah Formation		
Green River Formation	1740'	(+ 3107)
Wasatch Formation	5153'	(- 306)
Total Depth	6512'	

LOGS:	Schlumberger:	Induction-Electric	318 to 6512'
		Micro - Log	315 to 6511'
		Sonic Gamma-Ray	1000 to 6508'
	McCullough	Gamma-Ray-Tracer	5940 to 6400'
		Gamma-Ray Neutron-Cement	1300 to 6445'
	Continental Fluid & Cuttings Analysis		2800 to 4204'
			5694 to 6506'

DRILLING TIME: One foot drilling time was maintained by Geolograph.

SAMPLE PROGRAM: One set of wet samples was caught every 10 feet and sacked in cloth bags. In scattered zones of interest 5 foot samples were caught and sacked. Cores were sampled in 1 foot intervals. One set of samples was screened, washed and dried and sacked in paper envelopes.

CORES: Core # 1, 3304 to 3330', Cut 26', Rec'd 26'. Coring time 15,14,11,12,12,8,11,12,10,10,15,8, 7,7, 10,10,11,12,10,5,6,7,8,10,12, and 10 in minutes per foot.
Core # 2, 3578 to 3591', Cut 13', Rec'd 13'. Coring time 13,15,18,19,19,17,19,18,20,20,18,23, and 28 in minutes per foot.
Core # 3, 6117 to 6140', Cut 23', Rec'd 23', Coring time in minutes per foot. 8,10,10,8½,9,6,6,6,6,7,8, 14,13,14,15,15,18,22,20,15,15,17, and 20.

DRILL STEM TESTS:

DST # 1, 3283 to 3330', Initial Shut In 30", T.O. 96", Final Shut In 30". Gas to surface in 2 minutes at a rate of 700,000 CFGPD. Rec'd 180' HGCDM. ISIP 1680 PSI, IFP 98 PSI,IHP 1841 PSI,FSIP 1621 PSI, FFP 179 PSI, FHP 1824 PSI.

DST # 2, 3505 to 3591', ISI 30", T.O. 60", FSI 30" weak blow throughout test. Rec'd 110' GCM with rainbow of oil. ISIP 1620, IFP 138, IHP 2018 PSI, Temp. 128° FSIP 924, FFP 145, FHP 1979 PSI.

DST # 3, 6090 to 6140', ISI 30", T.O. 61", FSI 30" Opened with strong blow decreasing to weak blow by end of test. Rec'd 2250' Gas in drill pipe and 100' GCM. ISIP 3095 PSI, IFP 80, IHP 3428 PSI, FSIP 147 PSI, FFP 95, FHP 3396 PSI.

DST # 4, 6226 to 6263', ISI 30", T.O. 60", FSI 30" Gas to surface in 4" at a rate of 510,000 CFGPD, decreasing to 235,000 CFGPD by end of test. Rec'd 210' HGCM. ISIP 3282 PSI, IFP 129 PSI, IHP 3536 PSI, FSIP 2919 PSI, FFP 132 PSI, FHP 3456 PSI.

DST # 5, Misrun, 6358 to 6391', ISI 30", T.O. 60" FSI 30". Strong blow throughout test. Rec'd 4320' VHGCDM. Lead in drilling string. ISIP 2243 PSI, IFP - PSI, IHP 3501 PSI, FHP - PSI, FSIP - PSI, FFP - PSI.

DST # 5A, Misrun, 6360 to 6391', Tool Plugged.

MUD PROGRAM: Fresh water and native mud was used from the surface to 3304 feet. At 3304' the well blew out and caught fire necessitating mudding up at this point. A chemically treated gel mud was used to 4204' in here the mud system was converted to gasiated water drilling in order to speed up the penetration rate. It became necessary to convert back to mud again at 5684' due to sloughing Wasatch red beds. Mud was used to total depth.

LOST CIRCULATION: No notable zones of lost circulation were encountered while drilling Ute Trail # 5.

WATER FLOWS: The well flowed water in varying amounts from the fractured shale interval 2800 to 3304 feet.

SHOWS OF OIL & GAS: Residual oil shows occur in almost all porous sands in the Uintah formation.

Residual to live oil and gas shows were noted in the Green River brown dolomitic shales and oolitic sands. A gas blow out occured at 3304 feet and caught fire. A drill stem test of this zone indicates commercial production. Gasiated water drilling makes interpretation of shows from samples somewhat difficult, however, shows in samples plus electric log interpretation indicate some of the thin sands in the lower Green River are promising.

All Wasatch sands which had gas "kicks" on the mud logger were either cored or tested. The only promising sand occured at 6230 to 6270 feet.

COMPLETION PROCEEDURE:

ZONE 6233 to 6263': Fraced down tubing under packer, formation broke at 6200 PSI. Pumped 40 barrels fluid into formation at 2800 PSI. Stopped frac and prepared to frac down casing.

Fraced down casing and tubing with 14,658 gallons (349 bbls) # 2 diesel oil treated with 1,650 pounds Adomite and 22,000 pounds 20/40 mesh sand. Flushed diesel with 300 barrels salt water. Maximum treating pressure 3900 PSI, Minimum treating pressure 2600 PSI. Average injection rate 34 bbls/minute. Immediate shut in pressure 1600 PSI. Fifteen minute shut in pressure 1400 PSI.

ZONE 6368 to 6388: Fraced down tubing with 250 gallons mud acid, 12,000 gallons salt water, 16,700 pounds of 20/40 mesh sand. Maximum treating pressure 4900 PSI and minimum 4500 PSI. Average injection rate 10 bbls per minute. Immediate shut in pressure 2100 PSI, 15 minute 1700 PSI. Zone made slight amount of gas and water.

ZONE 6241 to 6255: Spotted 250 gallons mud acid in and across perforations.

Fraced down tubing with 12,600 gallons salt water, and 16,000 pounds 20/40 mesh sand. Maximum treating pressure 4800 PSI, Minimum 4450 PSI. Average injection rate 10.5 bbls/minute. Immediate shut in pressure 1800 PSI, 20 minute shut in pressure 1650 PSI. Frac job screened out after 4000 pounds sand in. Reversed well and finished frac.

ZONE 6238 to 6260 Refraced: Fraced down casing and tubing with spearhead of 500 gallons of mud acid, 35,280 gallons (840 bbls) treated salt water and 76,000 pounds of 20/40 mesh sand. Maximum treating pressure 3800 PSI, Minimum treating pressure 2000 PSI Average injection rate 42 bbls/minute. Immediate shut in pressure 3200 PSI; 10 minute shut in pressure 1700 PSI.

BIT RECORD

NO.	SIZE	MAKE	TYPE	DEPTH FROM	DEPTH TO	FEET	HOURS
1	12-1/4"	HTC	OSC	0	191	191	13-1/2
2	12-1/4"	HTC	OSC	191	318	127	8
3	17-1/2"	REED	OPENER	181	181	181	2
4	17-1/2"	REED	OpenER	181	316	135	15
5	8-3/4"	HTC	OSC-1G	318	733	415	11
6	8-3/4"	HTC	OSC-1G	733	1066	333	5-1/4
7	8-3/4"	SEC	S-3	1066	1314	248	5-3/4
8	8-3/4"	SEC	S-6	1314	1455	141	5 3/4
9	8-3/4"	HTC	OWV	1455	1736	281	14-1/4
10	8-3/4"	SEC	M4N	1736	1825	89	6
11	8-3/4"	HTC	OWV	1825	1890	65	5-1/2
12	8-3/4"	SEC	M4N	1890	1946	56	~~3-1/2~~ 6
13	8-3/4"	SEC	M4L	1946	2055	109	10
14	8-3/4"	HTC	OWV	2055	2183	128	10-1/2
15	8-3/4"	SEC	M4L	2183	2336	153	10-1/4
16	8-3/4"	SEC	M4L	2336	2575	239	11-1/2
17	8-3/4"	SEC	M4L	2575	2785	210	10-1/2
18	8-3/4"	SEC	M4L	2785	3035	250	10
19	8-3/4"	SEC	M4L	3035	3261	226	10-1/2
20	8-3/4"	SEC	M4L	3261	3304	43	2 1/4
21	8-3/4"	SEC	M4L	3304	3394	90	9-1/4
22	8-3/4"	REED	YM	3394	3453	59	10-1/2
23	8-3/4"	SEC	M4L	3453	3531	78	11-1/4
24	8-3/4"	SEC	M4L	3531	3598	67	5-1/2
25	8-3/4"	HTC	OWV	3598	3695	97	13-3/4
26	8-3/4"	HTC	OWV	3695	3759	64	9-3/4
27	8-3/4"	SEC	M4L	3759	3837	78	13
28	8-3/4"	SEC	M4L	3837	3891	54	9-1/4
29	8-3/4"	SEC	M4N	3891	3935	44	6-3/4
30	8-3/4"	HTC	OWV	3935	4005	70	12-1/2
31	8-3/4"	HTC	OWV	4005	4055	50	9-1/2
32	8-3/4"	REED	YS-1	4055	4117	62	8
33	8-3/4"	REED	YS-1	4117	4204	87	15-1/4
34	8-3/4"	REED	YS-1	4204	4398	194	8-3/4
35	8-3/4"	REED	YS-1	4398	4678	280	10-1/2
36	8-3/4"	SEC	M4N	4678	5036	358	13
37	8-3/4"	HTC	OWV	5036	5302	266	12-3/4
38	8-3/4"	SEC	M4N	5302	5684	382	14-1/4
39	8-3/4"	SEC	M4N	5684	5711	27	5-1/2

40	8-3/4"	REED	YS-1	5711	5790	79	17-3/4
41	8-3/4"	REED	YS-1	5790	5898	108	18-3/4
42	8-3/4"	SEC	M4L	5898	5988	90	19-1/2
43	8-3/4"	HTC	OWV	5988	6084	96	18-3/4
44	8-3/4"	HTC	OWV	6084	6117	33	3-3/4
45	8-3/4"	CHRIS	DIA	6117	6140	23	
46	8-3/4"	REED	YS-1	6140	6263	123	19-3/4
47	8-3/4"	REED	YS-1	6263	6351	88	17-3/4
48	8-3/4"	HTC	OWV	6351	6393	42	5-1/4
49	8-3/4"	SEC	M4H	6393	6469	76	19
50	8-3/4"	REED	YS-1	6469	6509	40	8 3/4

SLOPE TESTS:

60' - 1/4°	2575' - 3/4°
168' - 1/4°	3292' - 1-1/4°
240' - 1/2°	3531' - 1-3/4°
318' - 1/2°	3695' - 1-3/4°
560' - 3/4°	3837' - 1°
733' - 1/4°	3891' - 1-3/4°
1314' - 1/4°	3935' - 1-1/4°
1455' - 1°	4005' - 1-1/2°
1736' - 1°	4117' - 1°
1825' - 1°	4200' - 1°
2055' - 3/4°	5790' - 1-1/4°
2336' - 3/4°	5988' - 1°

320-30	Cement.
330-40	Cement with trace gray siltstone.
340-50	Cement.
350-60	Siltstone shale, gray, green-gray, red-gray firm blocky.
360-70	Shale siltstone, as above with sandstone, white, very light gray, fine to coarse grained, angular to sub-rounded, clear frosted, very light amber quartz grains with trace gray, white, black chert, trace mica trace gray and black accessory mineral, argillaceous to kaolinitic matrix slightly calcareous trace brown to orange oil stain.
370-80	Siltstone, shale and sandstone as above with trace orange to brown oil stain, copious cement.
380-90	Shale, purple-gray, dark-lavendar, gray, green-gray, green, firm, blocky, calcareous, silty.
390-400	Shale as above with very silty streaks trace sandstone with black bitum residue.
400-10	Shale as above with very silty streaks trace sandy streaks considerable cement.
400-10	Shale as above with silty streaks trace sandy streaks considerable cement.
420-30	Shale as above silty streaks trace sandy streaks considerable cement.
430-40	Shale as above.
440-50	Sandstone, white, very light gray, fine to medium - coarse grained, angular to sub-rounded, clear very frosted, very light orange to trace very light pink, very light green-white, quartz grains, with trace black, gray, white, chert grains, trace green to black accessory mineral, trace green clayey inclusions, kaolinitic matrix, slightly calcareous trace orange and brown oil stain.
450-60	Sandstone as above with spotty orange oil stain.
460-70	Sandstone as above with trace purple-gray, green silty shale.
470-80	Shale light purple-gray, red-purple, gray-green, purple-green, firm blocky, micro-micaceous with very silty and sandy streaks.
480-90	Shale as above with very silty and sandy streaks, trace sandstone light purple, very fine grained, argillaceous calcareous.
490-500	Shale as above with very silty and sandy streaks, trace sandstone, light purple, very fine grained argillaceous calcareous.
500-10	Shale as above with scattered silty streaks.
510-20	Shale as above with scattered silty streaks.
520-30	Shale gray-purple, purple-green, green, firm, blocky to sub-splintry, with scattered silty and sandy inclusions trace sandstone.

530-40	Sandstone, white, very light gray, fine to medium grain, angular to sub-rounded, clear, frosted, trace light orange, and pink quartz grains trace black, red, gray chert grains, with trace green to black accessory mineral micaceous trace green clay inclusions, very calcareous firm tite trace shale as above.
540-50	Sandstone as above with good trace shale as above.
550-60	Sandstone as above with good trace shale as above.
560-70	Sandstone as above with yellow-brown, orange oil stain, and globules trace shale.
570-80	Sandstone as above with yellow-brown, orange oil stain and globules trace shale.
580-90	Sandstone as above with trace oil stain, trace shale as above.
590-600	Shale, siltstone, light gray-purple, gray-green, green, argillaceous calcareous, very slightly micro-micaceous, trace sandstone as above.
600-10	Shale siltstone as above with trace interbedded white, medium to fine grained, sandstone.
610-20	Shale siltstone, as above with trace interbedded white, medium to fine grained, sandstone, with trace brown oil stain.
620-30	Shale very light green, green-purple, red-purple, firm, very silty shale, trace white, benotonite, very firm, siltstone
630-40	Sandsthe, whte, very light gray, very fine to medium grained, very calcareous, kaolinitic, micro-micaceous, trace bøown oil stain, trace shale as above.
640-50	Sandstone as above very scattered trace oil stain, weak trace pyrite.
650-60	Sandstone as above very scattered trace oil stain trace green clayey inclusions.
660-70	Sandstone as above scattered trace oil stain green clayey inclusions.
670-80	Sandstone as above scattered trace oil stain, green clayey inclusions, trace shale, purple-gray, green.
680-90	Sandstone as above scattered trace oil stain with good trace purple-gray, green-purple, green shale.
690-700	Sandstone and shale as above.
700-10	Shale, light gray-green, light green, gray-purple, green-purple, firm, blocky, micro-micaceous, trace sandstone as above.
710-20	Shale as above predominate, very light green, fair trace very fine to fine grained, bentonite, sandstone with brown oil stain.
720-30	Shale as above predominate, very light green, fair trace very fine to fine grained, bentonite, sandstone.
730-40	Shale as above predominate, very light green, fair trace very fine to fine grained, bentonite sandstone.
730-40	Shale as above predominate very light green trace interbedded thin silt and sandstone streaks.

740-50	Siltstone, white, very limy, bentonite, white, very firm, very calcareous, silty.
750-60	Siltstone, white, very limy, bentonitic.
760-70	Siltstone, sandstone, white, very fine grained, limy, bentonite weak trace spotty brown oil stain.
770-80	Silstone and sandstone, as above trace light gray-green, firm, shale.
780-90	Siltstone, sandstone as above porcellanitic trace very light green shale.
790-800	Siltstone sandstone as above with very scattered light brown oil stain, trace black residual oil
800-10	Limestone, light buff, buff-white, very light gray, crypto to micro-xln, den, tite, argillaceous slightly micro-micaceous, very scattered silty streaks.
810-20	Limestone as above.
820-30	Shale, very light green, very light gray-green, firm, very calcareous, with trace siltstone, sandstone, white, very light gray, very fine grained, calcareous trace limestone nodules.
830-40	Siltstone, buff-gray, light green-gray, very light gray, very calcareous, argillaceous micro-micaceous, trace shale as above.
840-50	Siltstone, and shale as above.
850-60	Siltstone and shale as above.
860-70	Siltstone and shale as above.
870-80	Siltstone and shale as above.
880-90	Siltstone and shale as above.
890-900	Siltstone, and shale as above with trace sandstone, very light gray-white, very fine grained, calcareous, micro-micaceous, trace glaucnonite.
900-10	Siltstone and shale as above with sandstone, light gray, fine to medium grained, calcareous argillaceous, micro-micaceous
910-20	Siltstone and shale as above sandstone as above.
920-30	Sandstone light gray, fine to medium grained, angular to sub-rounded, clear, frosted, quartz grains, with black and gray chert grains, calcareous, firm tite with trace shale gray, green, firm, slightly calcareous, slightly silty streaks.
930-40	Shale, light purple-gray, green-gray, light gray, firm, blocky with silty streaks, trace sandstone as above.
940-50	Shale as above with trace very dark gray carbonaceous shale, with silty and sandy streaks.
950-60	Shale as above with silty inclusions.
960-70	Siltstone sandstone, very light gray, very fine grained, argillaceous calcareous, slightly micro-micaceous, with shale as above.
970-80	Siltstone, sandstone as above with considerable shale as above.
980-90	Siltstone, sandstone, light gray, light gray-green, very fine grained, very argillaceous, slightly micaceous, very calcareous slightly micaceous, very calcareous trace pyrite, trace green and red-uprple, bentonite shale.

990-1000	Limestone, very light brown, dark tan, dark cream-tan, micro-xln, silty and slightlyargillaceous firm tite with good trace shale and siltstone as above.
1000-10	Siltstone, sandstone, light gray, light green-gray, very fine grained, argillaceous, calcareous, micaceous, trace pyrite.
1010-20	Siltstone as above with trace green, purple-red, siltstone, and shale, trace gilsonite
1020-30	Siltstone, as above trace dark gray shale trace gilstonite.
1030-40	Siltstone, light gray, green-gray, light red-purple, purple-gray, argillaceous, micaceous, calcareous, with green, gray red-uprple, shale, trace black bitum, shale.
1040-50	Shale, green, purple-gray, purple-green, blocky, firm, silty trace black bitum, shale.
1050-60	Shale as above with trace silty streaks.
1060-70	Shale as above with very silty streaks, trace sandstone, light gray, very fine grained, calcareous, slightly argillaceous, micaceous, with scattered trace brown oil fledks.
1070-80	Shale as above with trace siltstone, gray, dark gray, carbonaceous trace sandstone as above.
1080-90	Shale as above with very silty streaks, with trace brite orange flecks, trace limestone dolomitic-limestone, cream-tan den tite, very scattered trace brown oil flecks.
1090-1100	Shale as above with very silty streaks trace siltstone, sand-stone, light gray, very fine grained, trace black bitum residue.
1100-10	Shale as above silty streaks trace siltstone, sandstone, light gray, very fine grained, trace black bitum trace brown oil flecks.
1110-20	Shale as above with trace sandstone as above.
1120-30	Shale green, light purple-red, dark lavendar-red, purple-green, gray firm blocky silty with trace carbonaceous flecks trace siltstone, light gray-green, gray argillaceous micaceous, calcareous.
1130-40	Shale as above with trace sandstone, white, very fine grained, calcareous with trace brow n oil flecks.
1140-50	Shale as above with fair trace sandstone as above.
1150-60	Shale, gray, purple-gray, gray, with very silty streaks, traee siltstone, gray, green-gray, argillaceous trace cream-tan, tan, den, dolomite with trace black oil stain.
1160-70	Shale, siltstone, green-gray, green, purple-gray, firm, blocky, trace siltstone, sandstone white, very light gray very fine grained, calcareous, with occasional piece with brown oil stain.
1170-80	Shale, gray-green-gray, gray-upple, brite green, firm, blocky silty slightly micaceous trace tan, cream-tan den dolomite limestone.
1180-90	Shale as above with trace sandstone, light gray, very fine to medium grained, angular to sub-angular, calcareous, argillaceous trace brown oil stain.

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1190-1200	Shale as above with very silty streaks, trace pyrite.
1200-10	Shale as above with silty streaks trace pyrite, occasional, sandy inclusion.
1210-20	Shale as above silty streaks trace pyrite, trace gray-tan, calcareous micaceous, firm shale weak trace gilsonite
1220-30	Shale as above with increase in gray-tan, calcareous, micaceous firm shale slightlyoil stained.
1230-40	Shale, purple-gray, lavendar-gray, gray-green, firm, bolocky slightly micaceous, with scattered very silty streaks, weak trace sandstone, light gray, very fine to medium grained, green, clayey inclusions calcareous.
1240-50	Shale as above with weak trace sandstone.
1250-60	Shale as above with white trace sandstone.
1260-70	Shale as above with white trace sandstone.
1270-80	Shale as above with white trace sandstone.
1280-90	Shale as above with white trace sandstone.
1290-1300	Shale as above with weak trace sandstone.
1300-10	Shale, light green, gray-purple, very silty trace sandstone light gray light green-gray, very fine to medium grained, calcareous poorly sorted.
1310-20	Shale light green gray-purple, very silty trace sandstone as above with good spotty brown oil stain, trace brown oil shale.
1320-30	Sandstone, light tan, white, very fine to fine grained, calcareous fimr to friable with spotty brown oil stain, fair trace shale as above.
1330-40	Sandstone, very light tan, very light gray, white, very fine to medium grained, calcareous, with spotty brown oil stain, trace shale very light tan cream-tan limy, with black carbonaceous streaks, trace brown oil stain.
1340-50	Sandstone as above with shale as above good scattered oil stain fair trace free dark brown oil.
1350-60	Sandstone, white, very light gray, very fine to fine medium grained, firm to friable, very kaolinitic slightly micaceous tite with spotty oil stain, trace light green shale.
1360-70	Sandstone, white, light gray, very fine to medium grained angular to sub-angular, clear, frosted, verylight orange quartz grains with trace black to gray chert grains, trace black and green accessory mineral trace mica, kaolinitic firm, tite with weak trace brown oil stain, trace shale, light gray, light gray-tan, light green gray, sub-waxy lustre, meta-bentonite, firm, with scattered silty and sandy streaks very weak trace clear platy gypsum.
1370-80	Sandstone with fair trace shale as above.
1380-90	Shale, light to dark brown, tan, gray tan, earthy, firm, sub-waxy to waxy lustre with copious amoutn brown-black very dark brown oil.

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1390-1400	Shale as above with copious amount free brown-black, vey dark-brown, heavy oil.
1400-10	Shale, light gray, light gray-tan, light green, firm, sub-bloxky,slightly silty, very slightly calcareous frim with scattered brown oil stain, with brown oil stained vein filling platy gypsum.
1410-20	Shale as above with brown oil stain brown oil stained vein filling platy gypsum.
1420-30	Shale, light to dark brown, tan, gray-tan, firm calcareous, sub-blocky, with heavy black to dark brown oil stain with copious amount free oil coating samples.
1430-40	Shale light gray-tan, cream-t buff-tan, slightly calcareous to dlomite firm, sub-blocky, slightly micaceous with trace silty and sandy streaks, trace brown oil stain and free oil.
1440-50	Shale as above with heavy brown to black oil stain fair trace free oil.
1450-60	Shalelight tan, cream-tan, light gray-tan, light green-tan, slightly earthy, sub-blocky, slightly dolomite slightly micaceous with trace gypsum, filled veinlets, scattered light to heavy brown oil stain with scattered trace free oil very musty petro odor, trace light gray argillaceous siltstone.
1460-70	Shale as above with light to very heavy brown and black oil stain, trace free oil trace siltstone.
1470-80	Shale as above scattered very heavy brown and black oil stain
1480-90	Shale as above with scattered trace to very heavy brown to black oil stain trace free oil.
1490-1500	Shale as above with slightly decrease in staining trace silty and sandy streaks.
1500-10	Shale as above with decrease in staining trace silty and sandy streaks.
1500-20	Shale as above with fair trace siltstone, sandstone, light gray, very fine grained, argillaceous, slightly micaceous trace oil stain.
1520-30	Shale, very light gray-tan, very light tan, very light green-tan, firm, blocky, slightly calcareous to dolomite slightly micro micaceous with scattered brown oil stain, trace gypsum.
1530-40	Shale as above with scattered brown oil stain.
1540-50	Shale as above with limy streaks, trace dolomite limestone, very light yellow-tan, micro-xln, slightly argillaceous.
1550-60	Shale as above with limy streaks trace limestone as above very scattered spotty brown oil stain.
1560-70	Shale and limestone as above trace gypsum xlns.
1570-80	Shale as above with limy streaks.
1580-90	Shale as above with limy streaks.

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1590-1600	Shale very light gray-tan, very light tan, buff-tan, slightly earthy, firm, sub-blocky, slightly micro-micaceous dolomite to trace dolomite limestone streaks, trace dolomite limestone light yellow-tan, micro-xln, earthy slightly oil stain.
1600-10	Shale as above with trace dolomite-limestone, scattered white trace gypsum.
1610-20	Shale as above with weak trace dolomitel limestone.
1620-30	Shale as above with trace light to very dark brown shale, good brown oil stain trace oil stained gypsum trace free brown, very dark brown oil.
1630-40	Shale as above with dolomite limestone streaks, trace dark-brown shale scattered very good brown oil stain with trace free brown oil musty petro odor.
1640-50	Shale as above with scattered fair to good brown oil stain trace platy clear gypsum very weak trace siltstone and sand-stone.
1650-60	Shale as above with fair to good brown oil stain, trace free brown oil stain trace gypsum rare trace silty and sandy streaks.
1660-70	Shale as above with trace silstone sandstone, very fine grained argillaceous slightly dolomitic slightly micaceous trace green, silty shale.
1670-80	Shale as above with trace siltstone and strace green, silty shale, trace gypsum,
1680-90q	Shale, light to dark brown, tan, very light gray to green-tan earthy, sub-blocky, slightly drab slightly micro micaceous with very good brown oil stain, trace free brown oil.
1690-1700	Shale as above with very good brown oil stain, trace sand-stone light gray, fine grained,
1700-10	Shale, cream-tan, tan, light to very dark brown, firm, sub-blocky to brittle, with very dolomitic streaks, slightly micro to micaceous, with scattered good brown oil stain, very white trace verylight gray, very fine grained sandstone.
1710-20	Shale as above with scattered good oil stain very weak trace sandstone.
1720-30	Shale as above with scattered good oil stain trace gypsum.
1730-40	Shale as above with scattered good oil stain.
1740-50	Shale as above with fair spotty oil stain trace very silty shale.
1750-60	Shale light tan, tan, light to dark brown, light gray-tan firm, slightly sub-waxy lustre blocky, slightly dolomite, very weak trace gypsum, trace silty and sandy streaks, trace brown oil stain.
1760-70	Shale as above trace oil stain, trace siltstone, inclusions.
1780-80	Shale as above trace oil stain trace gypsum
1780-90	Shale as above with very good scattered spotty oil stain trace free oil very musty petro odor.
1790-1800	Shale as above with very good scattered spotty oil stain trace free oil very musty.
1800-10	Shale as above with very good scattere heavy oil stain trace free oil.

1810-20	Shale as above with very good scattered heavy oil stain, trace free oil.
1820-30	Shale as above with good scattered heavy oil stain trace free oil
1830-40	Shale as above becoming more earthy with spotted fair brown oil stain.
1840-50	Shale as above becoming more earthy with light to heavy brown oil stain.
1850-60	Shale, light to dark tan, light to dark brown, gray-tan, earthy slightly dolomitic, sub-waxy to oily lustre, firm, blocky slightly micro-micaceous, scattered fair to good brown oil stain
1860-70	Shale as above very earthy with very scattered brown oil stain.
1870-80	Shale as above very earthy with very scattered brown oil stain.
1880-90	Shale as above very earty with very scattered brown oil stain.
1890-1900	Shale as above very earthy with very scattered brown oil stain earthy pieces saturated.
1900-10	Shale cream-tan, tan, earthy tan, trace light brown, brown, fairly soft, sub-blocky, calcareous with limy streaks with very scattered good brown oil stain, earthy pieces saturated.
1910-20	Shale as above less earthy, becoming firmer good scattered oil stain.
1920-30	Shale as above less earthy, becoming firmer with very good saturated oil stain trace gypsum.
1930-40	Shale as above with very good scattered brown oil stain, very scattered light gray silty streaks.
1940-50	Shale as above with good scattered brown oil stain trace free brown oil with musty petro odor.
1950-60	Shale as above with scatterd very good brown oil stain with scattered saturated streaks, with very good trace limestone brown, dark-tan, micro-xln, firm, tite, slightly argillaceous trace white chalky mahculite.
1960-70	Dolomite-limestone, brown, dark-tan, crypto to micro-xln, slightly argillaceous firm, tite, with trace tan to brown oil shale trace pyrite, very good brown oil stain, trace free brown oil trace white nohuclete.
1970-80	Dolomite-limestone, as above with increase in shale, very good brown oil stain good amount free brown oil.
1980-90	Dolomite, dolomitic limestone, as above very agillaceous, with good trace light tan, tan, gray-tan, sub-waxy, shale, good oil stain.
1990-2000	Shale, light tan, tan cream-tan, very light gray tan, earthy, to sub-waxy lustre dolomite to calcareous with scattered good oil stain.

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2000-10	Shale, light to dark brown, tan, cream-tan, dolomite, firm sub-waxy, to earthy with very good oil stain, trace dolomite, tan, crypto to micro-xln, den tite.
2010-20	Shale as above with trace dolomite and nohculite, good oil stain, musty petro odor.
2020-30	Shale as above with trace dolomite brown, dark tan, crypto xln, argillaceous fair trace good oil stain with musty odor.
2030-40	Shale as above with calcite limestone, fair to good oil stain,
2040-50	Shale as above with vein filling calcite, fair oil stain.
2050-60	Shale as above becoming predominate dark brown with good oil stain, trace calcite and nohculite.
2060-70	Shale as above becoming predominate dark brown with good oil stain trace calcite and hohculite.
2070-80	Shale light to dark boown, tan, cream-tan, earthy-tan, calcareous to dolomitic, with greasy to waxy lustre, soft to firm, with very good oil stain and saturated trace free brown oil musty petro odor, trace calcite, gypsum nochulite.
2080-90	Shale as above with trace dolomite, cream-tan crypto xln, with very good oil stain.
2090-2100	Shale as above with dolomite, cream-tan with good oil stain. trace nochulite trace gilsonite.
2100-10	Shale as above with fair oil stain.
2110-20	Shale, tan, earthy tan, light brown dolomite soft, with fair to good oil stained.
2120-30	Shale as above with trace dolomite, tan to brown, micro to crypto to xln, slightly argillaceous firm den tite with fair to good oil stain.
2130-40	Shale as above with weak trace dolomite, trace gypsum with good oil stain.
2140-50	Shale as above with weak trace dolomite, trace gypsum with good oil stain.
2150-60	Shale, light to very dark brown, tan, earthy tan elastic, dolomite firm to soft, sub-waxy lustre, with trace calcareous, and gypsum vein material very good heavy brown oil stain and saturated musty petoo odor.
2160-70	Shale as above with trace dolomite, brown, tan, crypto to micro xln, good heavy brown oil stain, musty petro odor.
2170-80	Shale as above with trace dolomite fair to good brown oil stain with trace soda filled veinlets.
2180-90	Shale as above with trace dolomite, very good heavy brown oil stain trace free brown oil.
2190-2200	Shale light to dark tan, earthy tan, soft, dolomite, with fair to good trace gypsum and calcite oil stain.
2200-10	Shale as above with fair to good oil stain trace dolomite, tan, den.
2210-20	Shale as above with fair very good oil stain trace free oil trace dolomite tan, den, trace nohculite, gypsum and calcite.

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2220-30	Shale as above with fair to very good brown oil stain, trace free oil, trace dolomite trace gilsonite weak trace nahcolite.
2230-40	Shale, very light to dark brown, very light to dark tan, earthy, dolomite, pliable, with trace dolomite, tan, to brown, micro xln, agillaceous den tite, fair to good brown oil stain trace free oil trace nahcolite, calcite vein filling material
2240-50	Shale as above with fair to good oil stain, trace gilsonite.
2250-60	Shale as above with fair to good oil stain, trace oil saturated gilsonite.
2260-70	Shale as above fair to good oil stain, trace oil saturated gilsonit
2270-80	Shale as above with trace varied and laminated pieces trace clear platey gypsum.
2280-90	Shale as above varied and laminated piesce.
2290-2300	Shale as above with varied and laminated pieces.
2300-10	Shale, light to dark brown, light to dark tan, earthy, dolomite, firm, to soft, sub-waxy to waxy lustre, with trace calcite and gypsum baths, trace nocholite fair to good brown oil stain and saturated.
2310-20	Shale as above with trace gray tan, trace gilsonite tan, to good oil stain and saturated.
2320-30	Shale as above gilsonite fair to very good oil stain and saturated.
2330-40	Shale as above with trace dolomite, brown micro-xln, den, very heavily saturated with brown oil.
2340-50	Shale, light to dark brown, gray-brown, very light dark tan, earthy to very oily dolomite, firm to soft, scattered, very heavily brown oil saturated pieces, trace dolomite as above.
2350-60	Shale as above with trace dolomite very heavily brown oil saturated pieces.
2360-70	Shale as above trace dolomite very heavily brown oil saturated pieces.
2370-80	Shale as above trace dolomite, with fair to good brown oil stain and saturated.
2380-90	Shale as above with trace dolomite with scattered very good brown oil stain and saturated
2390-2400	Shale, light to dark brown, light to dark tan, earthy, firm to soft, dolomite, fair trace dolomite, light to dark brown, micro-xln, slightly argillaceous firm, tite with scattered very good heavy brown oil stain and saturated.
2400-10	Shale and dolomite as above with fair to good brown oil stain and saturated.
2410-20	Shale and dolomite as above with very good heavy brown oil stain and saturated.
2420-30	Shale and dolomite as above with decrease in dolomite, with very good oil stain.
2430-40	Shale light to dark tan, earthy, soft, dolomite elastic, with fair oil stain and saturated trace gray-brown, brown den dolomite.
2440-50	Shale as above with trace dolomite-limestone scattered fair to good brown oil stain.

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2450-60	Shale as above with fair trace dolomite limestone, scattered fair to very good brown oil stain.
2460-70	Shale as above with fair trace dolomite limestone, scattered fair to good brown oil stain.
2470-80	Shale as above with trace dolomitic limestone, scattered poor to fair brown oil stain.
2480-90	Shale as above with trace dlomite, dolomite limestone with scattered fair to good brown oil stain and saturated.
2490-2500	Shale as above with dolomitec dolomitic limestone, with scattered fair to good brown oill stain and saturated.
2500-10	Shale, light to dark tan, resineous tan, frim to soft elastic, dolomite laminated, saturated with light brown oil good petro odor slightly musty.
2510-20	Shale as above with very good oil saturated shale.
2520-30	Shale as above good oil saturated shale.
2530-40	Shale as above good oil saturated shale.
2540-50	Shale, light to dark tan, gray-tan, earty tan, traces resineous tan, dolomite, firm dolomitic, trace laminated shale fair to good oil stain.
2550-60	Shale as above with scattered very heavily saturated oil streaks.
2560-70	Shale light to very dark brown, gray-brown light to dark tan, firm sub-brittle to soft plastic, waxy lustre, slightly micro micaceous, with very good heavy brown oil saturated.
2570-80	Shale as above.
2580-90	Shale, light to dark gray, dark brown, brown light to dark tan, dolomite firm, oil stained, with trace dolomite, buff-tan, very light tan, micro-xln, firm, tite, trace sandstone, buff-white, very fine grained dolomite very firm.
2590-2600	Shale as above with trace dolomite fair trace indurated silt and sandstone as above.
2600-10	Shale light to dark tan, resineous tan, trace very dark brown, soft, elastic, pliable dolomite, with good oil stain weak trace dolomite as above.
2610-20	Shale as above with trace laminated dark brown and tan shale good stain.
2620-30	Shale as above with trace laminated dark brown and tan shale good stain.
2630-40	Bolomite, light gray, light tan-gray, micor-xln slightly argillaceous den tite, with trace shale as above.
2640-50	Bolomite as above with fair trace tan to brown shale, trace calcite, nahcolite.
2650-60	Bolomite as above fair trace tan to brown shale calcaite nahcolite.
2660-70	Dolomite dolomitic limestone, light gray, very light green-gray, light gray-tan, micro-xln den slightly micaceous and agillaceous tite with lmoderate trace shale and with good brown oil stain.
2670-80	Shale, light to dark brown, gray-brown light to dark tan, firm blocky to soft, elastic earthy to waxy lustre dolomite with trace dolomite as above, fair to good oil stain

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2680-90	Shale as above with good oil stain trace calcite xln, weak trace nahcolite.
2690-2700	Shale as above with good oil stain trace calcite gypsum xls.
2700-10	Shale as above with increase in very dark brown, waxy, dolomite shale, good oil stain.
2710-20	Shale as above with increase in dark brown waxy dolomite, shale very good oil stain.
2720-30	Shale as above with good oil stain trace dolomite light tan, den
2730-40	Shale as above with good oil stain trace free oil trace dolomite very light tan, den.
2740-50	Shale as above with very good oil stain dolomite, very light tan den.
2750-60	Shale as above with very good oil stain trace dolomite.
2760-70	Shale as above with very good oil stain trace dolomite.
2770-80	Shale as above with good oil stain.
2780-90	Shale as above with fair oil stain trace dolomite.
2790-2800	Shale as above becoming firmer, with very good scattered brown oil stain with good trace free brown oil.
2800-10	Shale light to dark brown, light to dark tan, resineous, brown, dolomite, firm, blocky to soft pliable, fair brown oil stain fari trace dolomite light tan den.
2810-20	Shale as above with fair trace dolomite, light gray-tan, light tan, den firm, tite.
2820-30	Shale as above with moderate trace dolomite, fair scattered brown oil stain.
2830-40	Shale as above with fair to good brown oil stain, trace dolomite
2840-50	Shale as above fair to good brown oil stain moderate trace dolomite.
2850-60	Shale as above with fair to good brown oil stain weak trace dolomite.
2860-70	Shale as above with fair to good brown oil stain, trace dolomite very weak trace pyrite.
2870-80	Shale as above with fair scattered brown oil stain trace dolomite very.
2880-90	Shale as above with good trace dolomite, gray-tan, light to medium tan, den tite, scattered fair to good oil stain.
2890-2900	Shale as above with good trace dolomite as above fair scattered oil stain.
2900-10	Shale as above with good trace dolomite as above fair to good scattered brown oil stain.
2910-20	Shale as above with fair trace dolomite as above fair very good scattered brown oil stain.
2920-30	Shalelight to dark tan, gray-tan, trace light to very dark brown, very dolomite, firm, blocky, with very good brown oil stain, trace free brown oil trace dolomite, light to dark tan, buff den tite.
2930-40	Shale as above with fairtrace dolomite to dark tan, gray-tan buff, very firm den tite, with scattered excellent brown oil stain trace free brown oil.

2940-50	Shale as above with trace dolomite fair trace brown oil stain.
2950-60	Shale as above with ttace dolomite, fair scattered brown oil stain, weak trace chert, amber-brown.
2960-70	Shale light to dark tan, light to very dark brown, gray-tan, gray-brown, dolomite, waxy lustre firm blocky to soft pliable fair to good brown oil stain very weak trace dolomite, tan, gray-tan, cream-tan, den.
2970-80	Shale as above with fair to good brown oil stain, trace dolomite as above.
2980-90	Shale as above with scattered earthy tan, dolomite shale, dolomite light tan, light gry, tan, cream-tan, den firm, tite, with weak trace pyrite, very scattered good brown oil stain.
2990-3000	Shale as above with fair trace dolomite weak trace amber-brown chert, fair oil stain.
3000-10	Shale light to dark brown, light to dark tan, gray-tan, waxy to earthy lustre dolomite slightly micro-micaceous firm with fair to good brown oil stain, trace cream-tan, tan, gray tan, den, dolomite.
3010-20	Shale as above with resineous brown, shale, very good to free brown oil stain, trace dolomite as above trace very amber-tan and brown chert.
3020-30	Shale as above with resineous brown shale with good brown stain, trace amber-tan to amber-brown, very light tan, chert trace free brown oil.
3030-40	Shale as above very resineous very good brown oil stain.
3040-50	Shale as above with trace ceam-tan, dolomite limestone, micro xln, den, tite with trace ostracoda trace very light cream-tan very light amber-tan chert, scattered fair tight brown oil stain trace brown oil.
3050-60	Shale as above fair trace oil stain, good trace free brown oil.
3060-70	Shale as above with considerable cavings, very poor sample.
3070-80	Shale, gray-tan, light gray, light green-gray, calcareous to dolomite, micro-micaceous, with silty and sandy streaks trace shale and dolomite as above.
3080-90	Shale as above with silty and sandy streaks considerable cavings.
3090-3100	Shale as above with very silty and sandy streaks considerable cavings.
3100-10	Shale as above with silty and sandy streaks considerable cavings.
3110-20	Shale gray to tan, gray-brown, dark brown, trace green-gray, dolomite to calcareous micro-micaceous with scattered silty and sandy streaks, trce brown oil stain, weak trace micro-oolites.
3120-30	Shale, green-gray, tan-gray, dolomite, micro-micaceous, firm, blocky, trace silstone, sandstone very fine grained, calcareous micaceous firm, with scattered brown oil stain.

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3130-40 Shale as above with white trace sandstone, considerable cavings very poor sample.

3140-50 Shale as above with trace tan, cream-tan, den, dolomite, copious cavings.

3150-60 Shale light to dark brown, tan, dolomite, firm, blocky with scattered brown oil stain, trace dolomite, tan, red-tan, gray-tan, den, tite, fair trace cavings.

3160-70 Shale as above with poor to fair stain, trace dolomite as above considerable cavings.

3170-80 Shale as above with poor to fair stain trace dolomite as above considerable cavings.

3180-90 Shale as above with poor to good scattered brown oil stain, trace dolomite as above.

3190-3200 Shale, very light to dark tan, gray-tan, brown, gray-brown, dolomite, waxy, firm, blocky, trace dolomite, micro-xln, firm with trace piece pseudo-oolities and oolites, scattered very poor to good brown oil stain.

3200-10 Shale as above with considerable resineous brown shale with good oil stain trace dolomite as above.

3210-20 Shale as above with fair to good brown oil stain fair trace dolomite as above.

3220-30 Shale, dark brown, dark gray-brown, light to very dark tan, resineous to very waxy lustre, dolomite, sub-fissle with fair to good brown oil stain weak trace dolomite.

3230-40 Shale as above with fair to good brown oil stain with trace dolomite.

3240-50 Shale as above with poor to fair brown oil stain with trace dolomite considerable cavings.

3250-60 Shale as abovewith trace sandstone, very light gray, very fine to medium grained, calcareous, very weak trace pyrite, with scattered trace brown oil stain.

3260-70 Shale as above with predominate cavings, very poor samples.

3270-80 Shale as above with weak trace dolomite, predominate cavings very poor sample.

3280-90 Shale light to very dark tan, very light to very dark brown, dolomite, earthy, waxy and resineous lustre, with very scattered very good brown oil stain, trace dolomite, light gray, gray-tan den tite, trace free brown oil weak trace sandstone, very light gray, very fine to medium grained, calcareous with light brown oil stain.

3290-3300 Shale as above with trace dolomite as shows scattered fair to very good brown oil stain.

3300-04 No samples gas blow out.

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coning time 15,14,11,12,12,8,11,12,10,10,15,8,7,7,10,10,11,12, 10,5,6,7,8,10,12,10

3304-05 Shale, gray-green, trace slightly brown cast, sub-waxy lustre sub-fissle, brittle, calcareous.

3305-06	Shale, bended to laminated gray-green and tan to brown, firm calcareous sub-waxy with thin streaks of very light gray-green very silty den, tite, limestone.
3306-07	Shale agray-green, light tan-gray, green, sub-fissle, blocky calcareous micro-micaceous with thin streaks silty, very limy shale.
3307-08	Shale as above, with scatttered silty, very limy streaks trace cream-tan, crypto xln, limestone sand, trace scattered clear angular quartz, sand grains.
3308-09	Shale, dark gray-green, tan to brown gray-green, slightly micro-micaceous, clacareous, sub-waxy, firm, sub-fissle to blocky.
3309-10	Shale as above with secondary frac filled with buff to very light green micro xln limestone trace sand grains and pyrite trace weak carbonaceous plant fragment.
3310-11	Shale, tan, gray-green, dark gray-green, sub-waxy lustre, firm calcareous with scattered micro-mica streaks, with scattered limy silty streaks.
3311-12	Shale as above becoming very limy with scattered gilsonite replaced leave remains.
3312-13	Shale, as above with trace brown, tan, gray-green laminated shale, trace pyrite.
3313-14	Shale gray-green, tan-green, tan, waxy lustre, calcareous, slightly micro-micaceous, firm, blocky, laminated, trace black to brown carbonaceous plant fragment.
3314-15	Shale, gray-green, sub-waxy lustre, calcareous firm, blocky.
3315-16	Dolomite-limestone, light tan, earthy, crypto, micro very light xln and clastic and fragment, with scattered trace very fine clear quartz grains, trace obscure pseudo oolites, and fossil fragment fair petro liferous odor, trace very poor inter xln and fragment porosity.
3316-17	Dolomitic-limestone, limestone as above becoming denser, trace open verticle frac, with scattered brown free oil slightly salty taste, trace micro-ostracoda.
3317-18	Shale, gray-green, green-tan, tan, mottled to laminated, sub-waxy, very calcareous trace micro-micaceous slightly silty streaks firm, blocky with scattered frac with trace brown oil trace black carbonaceous plant fragment.
3318-19	Shale as above with no oil stain.
3319-19.3	Shale as above becoming very laminated with brown very waxy dolomite, shale, trace brown oil stain.
3319-20	Limestone, light tan, earthy, crypto to micro xln, firm, sub-brittle, den tite with trace verticle open frac with good brown oil stain trace bleeding gas, trace closed hair lime frac.
3320-21	Dolomitic limestone, dolomite, light to medium tan, crypto to micro xln slightly argillaceous firm, den tite, brittle, with brown oil along open veryticle frac. weak trace brown waxy, shale.

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3321-21.9	Dolomitic-limestone, limestone, light tan, earthy, crypto to micro-fragment and clastic, firm den, tite brittle, with trace verticle frac, with trace brown oil, slightly salty taste along frac.
3321.9-22	Shale, very dark gray-brown, very dark brown, waxy slightly micro-micaceous, slightly dolomitic firm, sub-fissle to blocky, brittle.
3322-23	Limestone, dark-tan, light brown, earthy, micro to medium fragment and clastic, micro to fine oolitic, and ostracodal, trace calcite filled oblique hair lime frac scattered, poor to fair inter fragment porosity and permeability good brown oil saturated good petro odor.
3323-24	Limestone as above becoming denser and tighter earthy, trace verticle open frac with good brown oil stain and petro odor, trace very poor inter fragment porosity.
3324-25	Limestone, light tan, tan, earthy, micro-clastic, slightly argillaceous, trace fossil shell fragment, firm, tite with fair petro odor, trace verticle frac.
3326-27	Dolomite-limestone, limestone, tan to light brown, earthy, micro xln, slightly argillaceous homogeneous to very irregular bedd, trace calcite and very den limestone streaks, trace open and closed hair line frac bleeding gas and brown oil trace dark brown, dolomite shale 1" bend, very siliceaous limestone very fragment.
3325-26	Limestone, tan, earthy, micro-fragment and clastic, trace ostracoda, eatthy, very slightly argillaceous firm, tite with slightly petro odor.
3327-28	Limestone, tan, micro-xln, slightly argillaceous firm, tite with trace hair line frac with brown oil stain, at 3327.9 to 3328, limestone, light tan, micro to medium clastic fragment, with poor porosity and thin lines of shale dark brown, resineous boown firm, waxy.
3328-29	Limestone, light to dark tan, earthy, micro-xln, very argillaceou with scattered micro-white specks trace limestone fragment, trace hair line verticle frac with brown oil stain trace carbonaceous plant fragment slightly salty taste.
3329-30	Limestone, light tan earthy, crypto to micro-xln, slightly argillaceous, den tite, trace obscure ostracodal shells, trace brown carbonaceous flecks with considerable open verticle fracs with good brown oil stain along frac planes

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3330-40	Missing
3340-50	Missing.
3350-60	Shale, green, gray-green, firm, blocky very silty streaks trace sandstone, light gray, light green-gray, very fine grained, calcareous trace limestone tan ostracoda scattereed weak trace oil stain.
3360-70	Shale, green, gray-green, trace purple-green, firm, blocky calcareous, with very silty streaks.
3370-80	Shale as above with increase in sandy and silty streaks.
3380-90	Siltstone, sandstone, white, very light gray, light green-gray, very fine graind, very calcareous trace micro oolites den tite, with trace shale, green-gray, gray purple-gray trace red-purple, firm, calcareous with silty streaks slightly micro-micaceous.
3390-3400	Missing.
3400-10	Limestone, very light cream-tan, tan, earthy, crypto to micro xln, to medium, fragment, slightly pelletoidal, micro-oolites with trace ostracoda and shaell fragment, scattered thin sandstone inclusions, very scattered very poor to fair inter fragment, porosity with very scattered brown oil stain (10%), trace siltstone sandstone, very light gray, very light tan-gray, very fine grained, limy den tite, trace green-gray, green, green-tan, waxy shale.
3410-20	Limestone, as above, with interbedded sandy streaks very scattered trace brown oil saturated pieces (10%) to sandstone and shale as above.
3420-30	Limestone and sandstone as above wih increase in den, very scattered occasional pieces stained (5%) increase in green-gray, green, gray-tan, waxy shale, with silty and sandy streaks.
3430-40	Shale, dark gray, dark gray-brown, dark green-gray, sub-waxy slightly micro-micaceous very calcareous with scattered silty and sandy streaks, trace sandstone, very light green gray, very fine grained limy, tite.
3440-50	Shale as above very firm, with scattered silty and sandy streaks.
3450-60	Shale brite green, gray-green, sub-waxy lustre, slightly calcareous, firm, blocky, micro-micaceous with trace limestone light to dark tan, buff-tan, crypto to micrp-xln, slightly argillaceous, firm, tite trace sandstone, light green-white very light tan-white, very fine grained, limy.
3460-70	Shale gray-green, green, gray, gray-tan, sub-waxy, calcareous firm blocky slightly micro-micaceous with silty streaks.
3470-80	Shale as above with trace limestone cream-tan, tan, crypto to micro xln, firm tite with very scattered trace oil stain.

3480-90 Limestone cream-tan, tan, crypto to micro-xln, trace oolitic fragment firm, tite with very scattered trace brown oil stain trace calcite fair trace shale as above.

3490-3500 Limestone, cream-tan, tan, earthy crypto to micro to fine xln oolitic and fragment, firm, tite with scattered trace brown oil stain, trace shale trace silty and sandy inclusions.

3500-10 Limestone as above with ostracodal streaks with fair but scattered sandstone inclusions trace oil stain trace shale.

3510-20 Sandstone, brown, tan, very fine to fine grained, calcareous, micro-micaceous, firm to friable well sorted, saturated with brown oil trace limestone as above trace black shale inclusions.

3520-30 Shale, medium to dark gray, green-gray, sub-waxy calcareous firm with trace sandstone, tan to white, very fine to fine grained, micro-micaceous calcareous, with very scattered brown oil stain.

3530-31 Siltstone, sandstone white very light gray-white, very fine to fine grained, micro-micaceous, calcareous firm to friable with scattered very thin limestone inclusions, slightly oolitic no show.

3531- Siltstone, sandstone as above with thin oolitic limestone inclusions no show.

3531-40 Siltstone, sandstone, light gray, green-gray, white, very fine to fine grained, calcareous micro-micaceous with argillaceous streaks with trace shale light gray, green-gray, firm, blocky calcareous very silty.

3540-50 Siltstone, sandstone as above with shale as above.

3550-60 Sandstone, white, very light tan, brown very light gray, very fine to fine grained, calcareous to limy, slightlymicro-micaceous clean, well sorted very firm, with trace friable pieces very scattered brown oil stain (15%) with trace shale and siltstone gray-green, dark gray.

3560-70 Interbedded siltstone, sandstone as above with limestone, tan, gray-tan, cream-tan, micro oolitic trace fine oolites, sandy very firm tite, and shale green-gray, gray-green, calcareous firm to soft gummy very scattered brown oil stain, no gas from samples mud.

3570-78 Sandstone, very light gray, tan, brown, very fine to fine grained slightly micro-micaceous, calcareous to limy, clean, well sorted firm, to friable with scattered fair porosity, scattered light to dark brown oil stain and saturated, (40% stained), trace green-gray, gray shale weak trace oolitic limestone as above

Core # 2, 3578-3591 Cut 13' Rec'd 13.4

3578.1-78.2 Sandstone, light gray, very fine to fine grained, limy matrix slightly micro-micaceous, with good trace micro-oolites light to dark gray, tan, very inudrated, tite, trace pyrite, no porosity no show.

3578.2-79	Sandstone, light gray, very fine to fine grained, limy matrix slightly micro-micaceous, very indurated, tite with thin irregular, streaks of gray gray-green, gray-tan, micro-micaceous firm, calcareous trace tan calcareous, flecks, trace pyrite, no fluorescence no cut with no show.
3579-80	Sandstone as above with thin imegular shale streaks weak trace pyrite, trace amber-brown, black carbonaceous and pyrite plant fragment
3580-80.2	Sandstone as above with copious amount black, carbonized and pyritized plant fragment with weak trace gilsonite, trace very thin irregular, shale inclusions.
3580.2-82	Shale, gray-green, tan-green, sub-waxy lustre, slightly micro-micaceous, calcareous with silty streaks, firm, sub-bfittle mass.
3582-83	Siltstone, light gray-green, calcareous very argillaceous, firm with trace thin streaks whale as above.
3583-84	Shale, dark gray-green, slightly tan, green, sub-waxy lustre very slightly micro-micaceous, calcareous, trace pyrite, cluster firm, sub-brittle mass. very scattered weak trace silty inclusions.
3584-85	Siltstone, lighty gray-green, green-gray, very calcareous, micro micaceous, with weak trace pyrite very firm.
3585-88	Shale, dark gray-green, green-gray, slightly tan, gray-green, calcareous, sub-waxy lustre, slightly micro-micaceous very firm sub-brittle mass. with scattered trace siltstone, inclusions.
3588-89	Interbedded shale as above and 1/8" to 1/4" streaks sandstone light gray very fine grained, limy slightly micro-micaceous very firm, tite no show.
3589-90	Interbedded sandstone and shale as above.
3590-91	Shale, dark green-gray, tan dark gray-green, mass. calcareous very slightly micro-micaceous firm, blocky, mass.
3591-91.4	Shale as above with trace very thin siltstone laminations trace pyrite
3591-3600	Shale, gray, green-gray, tan-gray, slightly sub-waxy, calcareous micro-micaceous, with considerable silty and sandy inclusions trace silt and sandstone, light gray, very fine grained, calcareous micaceous.
3600-10	Shale as above with very weak trace pyrite.
3610-20	Shale as above.
3620-30	Limestone, tan, light gray-tan, slightly cream-tan, micro-xln very oolitic ostracodal, firm tite with trace very poor inter oolitic porosity, with very scattered brown oil stain trace light gray very fine grained, calcareous sandstone inclusions.
3630-40	Limestone as above coquinoidal with scattered brown stain trace shale, dark gray, gray, calcareous very scattered trace sandstone.
3640550	Shale, siltstone, light gray, gray-green, very calcareous very firm, blocky, trace ostracoda trace sandstone, very light gray very fine grained, limy, very den tite, with very scattered oolitic and ostracoda, occasiona trace brown oil flecks.

3650-60	Shale, siltstone as above with trace brown, waxy show, trace sandstone, light gray, very fine grained, calcareous with oolitic limestone inclusions, trace ostracoda.
3660-70	Sandstone, very light tan, very light gray, very fine to fine grained, micaceous, clean, well sorted, calcareous firm to friable with trace light gray-tan, tan, oolitic limestone inclusions, scattered poor to fair porosity with good even light brown oil stain, trace gray, gray-green shale.
3670-80	Sandstone, white, very light gray, very light tan as above with spotty tan oil stain, black carbonaceous inclusions weak trace shale and oolitic limestone.
3680-90	Sandstone, white, very light gray, very fine to fine to medium fine grained, very mica, calcareous, clean fair sorting, trace black carbonaceous flecks, very firm to friable, with scattered poor porosity, scattered trace brown oil stain, trace shale, gray, green-gray, firm, blocky,
3690-3700	Shale, light to dark brown, tan, gray-brown, resineous, elastic sub-fissle to blocky dolomitic, waxy lustre with interbedded, limestone, tan, cream-tan micro-xln, oolitic firm, tite with scattered light brown oil stain, trace brown amber brown chert.
3700-10	Shale as above with interbedded oolitic, and den gray-tan, brown limestone, fair to good trace amber-tan, brown, white, gray-tan chert, scattered, fair oil stain.
3710-20	Shale as above with limestone, very light tan, very light red-tan, crypto xln, brittle, slightly fossil, scattered oil stain.
3720-30	Siltstone, sandstone, very light gray, light gray-tan, very fine to fine grained, limy slightly micaceous mica, argillaceous very hard tite with trace green-gray, green-tan, tan, brown, very calcareous to limy sub-waxy shale,
3730-40	Siltstone, sandstone as above with interbedded tan to brown limestone streaks, trace shale as above trace pyrite.
3740-50	Shale, gray, very dark gray-brown, gray, firm, blocky calcareous with interbedded, limestone, red-tan, tan, gray-tan, micro-xln slightly oolitic very firm, brittle, trace brown chert trace light tan, very fine grained, oil stained sandstone.
3750-55	Limestone, light tan, light amber-tan, light gray-tan, micro-xln, oolitic, ostracodal, with sub-chealky streaks, with scattered poor to fair interbedded, oolitic and micro-xln, porosity. scattered brown oil stain, appears water wet, trace chert, and interbedded brown waxy, dolomite shale.
3755-60	Shale, gray-green, gray, very dark gray, sub-waxy lustre, calcareous, slightly micaceous fissle blocky, with interbedded light gray, very fine grained, limy, micaceous hard tite, sandstone, and siltstone, trace oolitic ostracodal, tan, limestone.
3760-70	Shale as above with fair trace siltstone and sandstone trace limestone as above.
3770-80	Shale as above with fair trace siltstone, and sandstone trace limestone as above.

3780-90	Limestone, light tan, red-tan, tan, cream-tan, crypto to micro-xln, with scattered oolitic and ostracodal streaks, with very scattered trace very fine grained, sandstone, inclusions, very firm, brittle, tite trace brown-gray, gray, green-gray, calcareous shale.
3790-3800	Sandstone, very light gray, very light tan-gray, very fine grained calcareous to limy, micaceous, trace black carbonaceous inclusions very slightly argillaceous, very hard, tite, trace pyrite, very scattered trace brown oil stain.
3800-10	Shale, gray, green-gray, brown-gray, micaceous, calcareous, firm, blocky with considerable sandy silty inclusions.
3810-20	Shale as above with decrease in silty and sandy inclusions becoming sub-waxy.
3820-30	Shale as above with silty and sandy inclusions, trace gray-brown argillaceous limestone.
3830-35	Shale, brown, gray-brown, gray, waxy dolomite with trace tan, brown, den limestone trace chert.
3835-40	Sandstone, light gray, light tan, very fine to fine grained, micaceous, calcareous to very limy, firm, tite, trace very poor porosity within interbedded limestone, light tan, cream-tan, micro-xln and succrosic oolitic, slightly ostracodal with very scattered brown oil stain and saturated.
3840-50	Sandstone, as above with trace gray-green, sub-waxy calcareous shale.
3850-60	Sandstone as above with trace shale as above trace limestone, light tan, cream-tan, micro xln, oolitic sandy with soptty brown oil stain, very scattered trace very poor porosity.
3860-70	Limestone, light tan, tan, gray-tan, micro-xln, very oolitic pisolitic, with spherical to sub-tabular, with secondary calcite filled porosity, trace poor porosity, with trace brown oil stain trace sandstone, and shale as above.
3870-80	Siltstone, sandstone, very light gray, very light green-gray, very fine to fine grained, micaceous limy firm, tite, with trace argillaceous inclusions trace gray-green, shale, trace limestone as above.
3880-90	Shale, green, gray-green, brown-green, sub-waxy lustre, slightly micaceous, calcareous with trace pyrite, with very silty and sandy streaks, trace oolitic, tan, to brown limestone, with very scattered brown oil stain.
3890-3900	Sandstone, very light gray, buff, very fine grained, very limy micaceous, very firm, tite, with trace light gray-green, gray, argillaceous inclusions.
3900-10	Sandstone as above with fair trace shale as above.
3910-20	Siltstone, sandstone as above with very argillaceous inclusion trace shale as above.
3920-30	Shale, gray, green-gray, sub-waxy lustres, calcareous, slightly micaceous, with interbedded green, light gray-green, micaceous limy siltstone.

3930-40	Shale as above with trace sandstone, white, very light gray, very fine grained, limy, micaceous, trace pyrite.
3940-50	Shale as above with trace silt and sandstone.
3950-60	Sandstone, very light gray, very light gray-white, very fine grained, limy, micro-micaceous, very firm, very tite trace shale as above.
3960-70	Siltstone, sandstone as above with fair trace shale.
3970-80	Siltstone, sandstone very light gray, white, very fine grained micro-micaceous, limy, with scattered argillaceous streaks, very scattered trace very poor porosity, trace shale as above trace pyrite.
3980-90	Siltstone and sandstone as above with increase in argillaceous and very den streaks with fair trace shale, light gray-green, green, brown-gray, sub-waxy calcareous.
3990-4000	Silt and sandstone as above with trace shale.
4000-10	Missing.
4010-20	Siltstone, sandstone, very light gray, buff, very fine grained, limy, micaceous, very argillaceous inclusions, fair trace shale green, gray-green, gray, calcareous slightly micaceous, fimm, blocky.
4020-30	Siltstone, sandstone, very light gray, buff, very fine grained very limy micaceous, very firm, tite, trace shale as above.
4030-40	Shale as above with trace silt and sandstone.
4040-50	Limestone, tan to brown, micro-xln, oolitic with silty and sandy inclusions, fair trace shale, gray-green, gray, firm, calcareous.
4045-50	Shale, light gray-green, gray-green, gray, firm, blocky, calcareous very slightly micaceous.
4050-60	Shale, light to dark gray - green, gray, firm, blocky calcareous very slightly micaceous with scattered silty inclusions.
4060-70	Interbedded shale as above with copious amount, silt and sandstone, white, very light green, very light gray-green, very fine to fine grained, very calcareous micaceous, firm, tite.
4070-80	Shale as above with fair trace silt and sandstone as above.
4080-90	Sandstone, very light gray, very light tan, white, fine to medium grained, angular to sub-rounded, clear, slightly frosted, with trace very light pink very light orange, very light green quarts grains with occasional trace gray chert grains, slightly micaceous slightly calcareous, clean, well sorted, well.
4390-4400	Shale, gray-green, gray-brown, gray, sub-waxy, calcareous to dolomitic with scattered trace mica, scattered trace silty inclusions, very weak trace sandstone, white, very fine grained calcareous weak trace limestone, tran, micro-xln slightly oolitic, very scattered brown oil stain.
4400-4470	Missing.
4470-80	Shale, light gray-green, light gray-tan, sub-waxy very calcareous slightly micaceous, with scattered silty streaks trace sandstans white, very fine grained, calcareous.
4480-90	Shale as above with trace silty and sandy streaks.
4490-4500	Shale as above with trace silty and sandy streaks.
4500-20	Missing

4090-4100	Sandstone as above with predominate, gray, gray-green, brown-gray, micro-micaceous calcareous firm, blocky, shale with interbedded silty streaks.
4100-10	Shale as above with interbedded light gray-green, very limy, micaceous, siltstone.
4110-20	Siltstone, sandstone, white, buff-white, very fine to fine grained, very slightly micro-micaceous, very limy, very firm tite no show with trace shale as above.
4120-30	Siltstone, sandstone as above with very scattered trace very poor porosity, trace black carbonaceous inclusions trace shale as above.
4130-40	Silt and sandstone as above with fair trace siltstone, light gray-green, micaceous, limy.
4140-50	Shale, gray-green, gray slightly micro-micaceous, blocky, calcareous with very silty inclusions trace sandstone as above.
4150-60	Shale as above with silty inclusions.
4160-70	Shale as above with silty inclusions, with fair trace limestone light brown tan, gray-tan, micro-oolitic, micro-xln firm, den tite with trace brown oil stain.
4170-80	Shale as above.
4180-90	Shale as above with fair trace silt and sandstone, white, very light green-gray, very fine grained, calcareous to limy micro-micaceous, with argillaceous streaks frim, tite.
4190-4200	Shale as above with very silty streaks.
4200-10	Shale as above with very silty streaks trace gray-brown, sub-waxy shale.
4210-20	Shale as above with silt and sandstone very light green-white, very light gray, very fine to fine grained, limy to calcareous micro micaceous with trace micro oolitis, very weak trace light brown oil stain.
	Commenced Drilling with Gasiated Water At 4204. Samples very Poor to Fair with wide Gaps Due to insufficient Samples and sample Catchers.
4220-50	Missing
4250-90	Shale gray, gray-green, very light gray-green, blocky to sub-fissle sub-waxy calcareous with trace light gray-tan, limy shale very scattered silty and sandy inclusions.
4290-4300	Shale as above with moderate trace siltstone, sandstone with, white very light gray, very fine to fine grained, calcareous, slightly micaceous.
4300-30	Siltstone, sandstone as above with fair trace shale, scattered trace white cream-white, micro-oolitic.
4330-90	Missing.

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4520-30	Shale, light gray, green-gray, green-tan, sub-waxy calcareous firm, blocky with very scattered silty streaks trace sandstone white, very fine grained, calcareous.
4530-50	Missing.
4550-60	Shale, light gray, light gray-green, gray, green-tan, gray-tan, sub-waxy calcareous firm, blocky with very scattered silty and sandy streaks.
4560-4620	Missing.
4620-30	Shale as above.
4630-60	Missing.
4660-70	Shale, gray, gray-brown, brown, sub-waxy firm, blocky dolomite with trace dolomitic brown, crypto xln, very firm, with trace oil stain.
4670-80	Shale as above with trace dolomite trace oil stain.
4680-90	Shale as above with trace dolomite trace oil stain.
4690-4700	Shale as above with trace dolomite trace oil stain.
4700-50	Missing.
4750-60	Sandstone, white, light tan, very fine to fine medium grained, angular to sub-reunded, clear, frosted, light pink very light orange quartz grains, with trace gray chert, trace mica, calcareous, white, trace interstillial green shale firm to friable with very scattered very poor porosity, trace very scattered brown oil stain, fair trace shale as above.
4760-70	Sandstone as above with spotty brown oil stain, trace shale as above trace tan, fossil limestone.
4770-80	Sandstone as above with very spotty brown oil stain trace shale.
4780-90	Sandstone as above with weak very spotty brown oil stain, trace gray, gray-brown calcareous shale.
4790-4800	Sandstone, as above with weak very soptty brown oil stain, trace gray, gray-brown calcareous shale.
4800-10	Sandstone as above with fair trace interbedded, gray, dark-gray shale.
4810-20	Sandstone, as above with trace gray, dark gray, gray-green, shale scattered brown oil stain and saturated.
4820-30	Sandstone as above with trace shale, gray-green, gray-brown, scattered oil stain, no cut with wet sample good cut with dry sample.
4830-60	Missing.
4860-70	Sandstone, very light gray, very light green-gray, very fine to fine angular to sub-rounded, clear frosted quartz grains, with trace light gray chert grains, slightly micaceous, calcareous slightly argillaceous, very scattered trace brown oil stain, trace brown shale.
4870-80	Sandstone as above trace brown shale.
4880-90	Shale, brown, gray-brown, green-brown, light gray, light gray-green, calcareous, with very good trace sandstone as above with scattered stain.

4890-4900	Shale as above with increase in very light green-gray, shale good trace siltstone, sandstone, very light green-gray, very fine grained, argillaceous, slightly micaceous, calcareous.
4900-10	Shale as above with good trace siltstone and sandstone as above.
4910-20	Missing.
4920-30	Shale, brown, gray-brown, with trace light brown, green, very light gray-green, calcareous with interbedded silt and sandstone very fine grained, micaceous calcareous.
4930-40	Shale as above with trace silt and sandstone.
4940-50	Shale as above with very good trace siltstone, sandstone, very light gray, very light green-gray, very fine to fine to medium grained, angular to sub-rounded, clear, frosted, quartz grains with trace gray chert, micro-micaceous, calcareous, with fair trace brown, gray-brown, green-gray, shale.
4950-60	Silt and sandstone as above with good trace shale.
4960-70	Shale, brown, gray-brown, sub-waxy dolomite, firm, blocky trace smoky white chert.
4970-80	Shale as above with fair trace interbedded silt and sandstone.
4980-90	Shale as above with very weak trace interbedded silt and sandstone.
4990-5000	Shale, light to very dark gray, gray-brown, green, sub-waxy lustre, slightly calcareous, with interbedded silt and sandstone weak trace limestone, very light tan, micro-xln, oolitic, ostracodal weak trace coal.
5000-10	Shale as above with trace silt and sandstone.
5010-20	Shale as above with good trace sandstone, light tan, gray-tan, light gray, very fine grained, calcareous, micaceous with very scattered very poor porosity, with scattered good brown oil stain.
5020-30	Sandstone as above with good trace gray-green, gray- gray-brown, sub-waxy shale, scattered good brown oil stain.
5030-40	No sample.
5040-50	Shale, gray-green, gray, green, gray-brown, brown, sub-waxy, slightly calcareous, firm blocky with trace very light green-white, siltstone.
5050-60	Shale as above.
5060-70	Shale, light to very dark gray, green-gray, gray-brown, firm, sub-blocky sub-waxy lustre, trace limestone, very light gray-tan, very light tan, micro-xln and fragment, micro-oolitic and ostracodal.
5070-80	Shale as above with limestone, brown, tan, amber and brown, tan, gray-brown micro-xln, and fragment with scattered obscure oolitic and ostracodal streaks, trace pyrite.
5080-90	Limestone, tan to brown, gray-brown, crypto to micro-xln, with scattered trace ostracodal and oolites, fair trace amber, amber brown, semi-tracnslucent chart trace silt and sandy inclusions, with scattered brown oil stain, trace pyrite.
5090-5100	Limestone as above with trace tan to brown, very limy, firm, shale.
5100-10	Shale, light to dark brown, gray-brown, tan, sub-waxy lustre, calcareous to dolomitic firm, trace fossil fragment slightly oil stained.

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5110-20	Shale as above trace iridescent fossil shale fragment, scattered oil stain.
5120-30	Shale as above with trace limestone, light to dark tan, amber, den tite, trace pyrite and silic stain.
5130-40	Shale as above with trace limestone as above very scattered oil stain.
5140-50	Shale as above with increase in gray, fair trace oolitic and ostracodal limestone light tan, amber-tan, very firm to trace very poor porosity, with very light brown oil stain trace very light gray, very light green-gray, very fine to fine grained, calcareous sandstone.
5150-60	Interbedded limestone, sandstone and shale as above predominate sandstone and limestone.
5160-70	Shale, very light gray-green, very light green, very light gray, sub-waxy slightly calcareous, blocky trace pyrite with interbedded silt and sandstone, very light gray-green, very light green, very fine to fine grained, very calcareous, firm tite.
5170-80	Siltstone, sandstone as above with trace green, very light gray waxy shale, fair trace purple-red, red-brown, green-gray, firm blocky shale, trace limestone trace tan to brown, den.
5180-90	Shale, red-purple, red-brown, yellow, yellow-tan, light green, gray-green, sub-waxy meta-bentonite, calcareous, with silty inclusions with trace siltstone and sandstone, very light gray, very fine grained, calcareous, slightly micaceous, slightly argillaceous.
5190-5200	Shale as above with increase in gray-green, light gray, red-gray, red-green shale with silty and sandy streaks.
5200-10	Shale, varicolored as above with silty and sandy streaks.
5210-20	Shale varicolored as above with silty and sandy streaks.
5220-30	Shale, light green, very light gray-green, very light gray, trace red-brown, red-purple, meta-bentonite, sub-waxy slightly calcareous, with very silty and sandy inclusions.
5230-40	Shale as above with very silty and sandy inclusions considerable cavings.
5240-50	Shale as above with very silty and sandy inclusions considerable cavings.
5250-60	Shale as above with good trace silty and sandy inclusions.
5260-70	Shale as above with silty and sandy inclusions.
5270-80	Shale varicolore,d with sandstone, very light gray, very light green-gray, very fine to fine grained slightly micaceous, slightly calcareous with trace light green interstial shale, trace pyrite.

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5280-90	Sandstone, very light green-white, very fine to fine to medium grained, slightly micaceous, slightly calcareous with light green interstitial shale, trace varicolored shale.
5290-5300	Shale, varicolored, with trace sandstone as above.
5300-10	Shale varicolored, with predominate, gray-green, green, trace silty and sandy streaks.
5310-20	Shale varicolored with trace black, carbonaceous shale.
5320-30	Shale, purple, red-purple, red-brown, yellow-tan, green, gray-green, very light gray, meta-bentonite, sub-waxy lustre slightly calcareous with very scattered silty stteaks.
5330-40	Shale, varicolored as above.
5340-50	Shale varicolored as above with trace limestone nodules, scattered silty streaks.
5350-60	Shale, varicolored as above with increase in reds, trace gypsum.
5360-70	Shale, varicolored as above with increase in reds, trace gypsum trace limestone nodules.
5370-80	Shale varicolored as above with trace gypsum trace varicolored limestone nodules.
5380-90	Shale varicolored, as above, with trace gypsum trace varicolred, limestone nodules.
5390-5400	Shale, varicolored, trace gypsum, scattered very silty inclusions.
5400-10	Shale as above trace gypsum scattered, very silty inclusions.
5410-20	Shale varicolored, meta-bentonite, sub-waxy lustre, slightly calcareous with scattered silty inclusions, trace gypsum.
5420-30	Shale as above with silty streaks trace gypsum.
5430-40	Shale as above with silty steaks, trace gypsum, trace limestone nodules.
5440-50	Shale as above becoming predomint rusty-red, trace gypsum.
5450-60	Shale as above becoming predominate rusty-red, trace gypsum.
5460-70	Shale as above becoming predominate rusty-red, trace gypsum. with trace sandstone, very light gray, very light red-gray very light purple-gray, very fine to fine to medium grained, slightly micaceous, calcareous, trace green, and red-purple argillaceous inclusions, firm, tite.
5470-80	Shale as above with increase in silt and sandstone as above.
5480-90	Shale as above with fair trace silt and sandstone.
5490-5500	Shale as above with trace silt and sandstone, trace gypsum.
5500-10	Shale, red-purple, red-brown, with red-gray, red-green, gray-green, meta-bentonite sub-waxy slightly calcareous, shale trace silty and sandy inclusions.
5510-20	Shale as above with silty and sandy inclusions, ttrace gypsum.
5520-30	Shale as above with silty and sandy inclusions trace gypsum, trace limestone nodules.
5530-40	Shale as above with silty and sandy inclusions trace gypsum trace limestone nodules.
5540-50	Shale as above with silty and sandy inclusions trace gypsum trace limestone nodules.

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5550-60	Shale as above with scattered silt and sandy inclusions.
5560-70	Shale as above with fair trace sandstone, very light gray-purple, red-gray, very fine to medium grained, calcareous, slightly argillaceous firm tite.
5570-80	Shale with trace interbedded sandstone as above trace gyrpsum.
5580-90	Shale as above with scattered silty inclusions trace gypsum.
5590-5600	Shale, purple-red, red-brown, rusty-red, green-gray, green-red, gray-red, with gray-green, very light green, yellow, purple-gray, sub-waxy lustre, meta-bentonite, slightly calcareous, with scattered silty streaks trace micro to very small limestone nodules, occasioan trace gypsum.
5600-10	Shale as above.
5610-20	Shale as above with thin, light gray, light purple-gray, very fine to fine grained, limy sandstone streaks.
5620-30	Shale as above with thin, light gray, light purple-gray, white, very fine to fine grained, limy sandstone streaks.
5630-40	Shale as above with trace sandstone inclusions trace gypsum.
5640-50	Shale as above with trace sandstone inclusions trace gypsum.
5650-60	Shale as above with moderate trace sandstone, very light gray, very light purple and lavendar gray, fine to medium grained angular to sub-rounded, varicolored quartz and chert grains, very slightly micaceous, calcareous argillaceous, kaolinitic very firm tite.
5660-70	Shale as above with trace sandstone trace black carbonaceous shale trace pyrite and gypsum.
5670-80	Shale as above with trace sandstone trace gypsum and carbonaceous shale.
5680-90	Shale as above with trace sandstone trace black, carbonaceous sub-waxy shale.
5690-5700	Shale as above with very weak trace sandstone, trace black, carbonaceous sub-waxy shale trace gypsum.
5700-10	Shale as above with trace carbonaceous black shale trace gypsum.
5710-20	Shale as above with very silty and sandy streaks shale becoming predominate rusty-red.
5720-30	Shale as above with very silty and sandy streaks predominate rusty-red.
5730-40	Shale as above with very silty and sandy streaks trace black carbon ceous shale streaks.
5740-50	Shale as above with very silty and sandy streaks weak trace black carbonaceous shale streaks.
5750-60	Shale as above with very sitly inclusions.
5760-70	Siltstone, sandstone, light gray-purple, very light rusty-red light gray, slightly salt and pepper, very fine to medium grained, very calcareous, argillaceous micro-micaceous, very firm, tite with fair trace shale as above.
5770-80	Siltstone sandstone as above with trace shale as above.
5780-90	Siltstone and sandstone as above with good trace varicolored shale predominate reds.
5790-5800	Shale, rusty-red, red-purple, red-brown, red-green, gray-green sub-waxy lustre meta-bentonite firm, blocky, with trace gypsum trace limestone nodules.

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5800-10	Shale as above with silty streaks trace gypsum.
5810-20	Shale as above with silt and sandstone, very light lavendar gray, very light red-gray, pink-gray, very fine to fine, micaceous, calcareous, argillaceous firm, tite.
5820-30	Shale and sandstone as above.
5830-40	Siltstone, sandstone as above with fair trace red-brown, purple-red shale.
5840-50	Siltstone, sandstone, as above with interbedded red-purple, red-brown shale.
5850-60	Siltstone, sandstone, white, very light red-gray, very light gray, slightly salt and pepper, fine to medium coarse grained, angular to sub-rounded, clear, frosted, varicolored quartz grains, scattered gray and black chert grains slightly micro-micaceous, calcareous, slightly argillaceous kaolinitic very firm to friable, no show trace shale as above.
5860-70	Siltstone, sandstone as above with increase in shale.
5870-90	Shale, red-brown, red-purple, with trace gray-green, sub-waxy meta-bentonite slightly calcareous with silty streaks trace sandstone as above.
5890-5900	Shale as above with increse in gray-green, trace gypsum.
5900-50	Shale as above with very silty and very sandy inclusions, trace gypsum, trace varicolored limestone nodules.
5950-70	Shale as above with very silty and very sandy inclusions, weak trace gypsum, trace varicolored limestone nodules.
5970-90	Shale as above with occasional black carbonaceous streaks, trace very silty and sandy streaks, trace varicolored limestone one piece very light gray and tan, very fine grained, calcareous sandstone, with oil stain cavings?
5990-6000	Shale brite, brick-red, red-brown, purple-red, gray-green, purple-green, meta-bentonite slightly calcareous, with silty strekas.
6000-10	Shale as above with very silty and sandy inclusions.
6010-20	Sandstone, white, very light green-white, fine to medium grained, varicolored quartz and chert grains, calcareous slightly micaceous tite, trace shale as above.
6020-30	Shale, red-brown, purple-red, rusty-red, green-red, gray-green, silty, meta-bentonite, slightly micaceous, trace limestone nodules.
6050-80	Shale as above with increase in gray and greens, with sandstone white, very light gray, very fine to fine grained calcareous, good trace limestone nodules.
6080-90	Siltstone, sandstone, very light green, very light gray-green, very light green-white, very fine to fine grained, calcareous argillaceous micaceous with trace green-gray, red-purple, red-brown, rusty-red, meta-bentonite shale.
6090-6100	Siltstone, sandstone, very light green, very light gray-green, very light green-white, very fine to fine grained, medium grained, angular to sub-rounded, clear frosted, with occasional very light pink, very light orange quartz grains, occasional gray chert green, slightly micaceous, trace green accessory mineral calcareous slightly argillaceous, kaolinitic trace pyrite,

no fluorescence no cut with trace interbedded, gray-green, sub-waxy calcareous shale trace varicolored shale.

6100-05 Siltstone, sandstone as above with scattered trace poor porosity with slightly gas kick in mud and sample trace shale as above.

6105-10 Sandstone as above with scattered trace very poor to poor porosity slightly gas kick in mud and samples very weak trace varicolored shale.

6110-15 Sandstone as above with scattered trace very poor to poor porosity slightly gas kick in mud and samples.

6117 Sandstone as above.

Core # 3, 6117-6140, Cut 23' Rec'd 23'
8,10,10,8,12,9,6,6,6,6,7,8,14,13,14,15,15,18,22,20,15,15,17,20

6117-18 Sandstone, very light green-white, very light green-gray, very fine to fine medium grained, angular to sub-rounded, clear frosted, with occasional very light pink, very light orange, quartz grains, very weak trace gray to black chert gray, trace very light green, accessory mineral, slightly micro-micaceous, (chlorite & biotite) slightly calcareous, slightly kaolinitic trace very light green interstitial clay, firm, tite, very scattered very poor porosity, no fluorescence, no cut with CCl_4 no odor.

6118-19 Sandstone as above no porosity, no show, trace pyrite, clusters.

6119-20 Sandstone as above no porosity, no show.

6120-21 Sandstone, very light gray, very light green-gray, very light green-white, fine to medium grained, angular to sub-rounded, clear frosted, with occasional, very light pink, very light orange quartz grains with very scattered occasiona, gray to black chert grains, slightly micro micaceous, (chlorite & biotite) trace very light green interstitial clay flecks, calcareous, kaolinitic firm, to sub-friable with scattered very poor to poor porosity, slightly sweet petro odor no fluorescence no cut with CCl_4.

6121-22 Sandstone as above with sweet petro odor, bleeding gas, no fluorescence no cut one horizon frac, lined with micro-pyrite, xls fair trace very poor porosity.

6122-23 Sandstone as above with sweet petro odor, bleeding gas, no fluorescence no cut with CCl_4 very poor to poor porosity, trace micro-pyrite, xls.

6123-24 Sandstone as above with fair trace poor porosity, scattered for permeable with sweet petro odor bleeding gas, very scattered trace pyrite xls.

6124-25 Sandstone as above with fair to very poor porosity scattered trace permeable with sweet petro odor bleeding gas, no cut no fluorescence.

6125-26 Sandstone as above with fair to very poor porosity scattered terce permeable with sweet petro odor bleeding gas, no cut very scattered pin point blue-yellow fluorescence very scattered trace gray-green, sub-waxy shale flecks.

DEKALB NO. 5 UTE TRAIL UNIT

6126-27	Sandstone, very light green-white, very light green-gray, fine to medium grained, sub-angular to well rounded, clear frosted with occasional trace very light orange, very light pink, quartz grains, very scattered trace gray, to black chert grains slightly micaceous, trace very light green interstitial clay flecks, calcareous, kaolinitic, firm to sub-friable, with scattered very poor to poor porosity, very scattered micro pyrite xls, with interbedded re-worked gray, gray-brown, gray-green, sub-waxy, very slightly calcareous trace black carbonaceous flecks scattered sweet petro odor no fluorescence no cut.
6127-28	Interbedded shale and sandstone as above predominate sandstone, with scattered very poor to poor porosity, with sweet petro odor.
6128-29	Interbedded shale and sandstone with considerable increase in shale very scattered trace micro-pyrite no to trace very poor porosity, scattered very slightly petro odor.
6128-29	Interbedded shale and sandstonewith considerable increse in shale, very scattered trace micro-pyrite, no to very poor porosity, scattered very slightly petro odor.
6129-30	Siltstone, sandstone, very light green-gray, very light gray, very fine to medium grained, sub-angular to well rounded, clear frosted, with trace very light orange, very light pink quartz grains, with occasional trace very light gray to black chert grains, trace micro-mica, trace interstitial very light gray clay flecks, calcareous kaolinitic trace miro pyrite xls, hard tite with very argillaceous streaks and considerable interbedded, re-worked green-gray, gray, sub-waxy, very slightly calcareous firm shale.
6130-31	Shale, siltstone and sandstone as above very weak trace carbonaceous plant fragment.
6131-32	Shale, siltstone and sandstone as above shale varies from very very light green to gray-green, light buff-tan, and predominate shale.
6132-33	Interbedded re-worked shale with silt and sandstone as above.
6133-34	Silt, sandstone, green, green, gray, fine to medium grained, angular to sub-rounded, clear frosted, with occasional very light orange very light pink, very light amber, quartz grains, very scattered light gray to black chert grains, trace very light green, interstitial clay flecks, limy, argillaceous, with scattered pyrite xls, very scattered trace interbedded shale no porosity, no fluorescence no cut, no odor.
6134-35	Siltstone very light gray-green, argillaceous limy, slightly micro-micaceous, trace pyrite xls, brittle.
6135-36	Siltstone as above no show.
6136-37	Siltstone as above becoming more argillaceous micaceous, trace pyrite.
6137-38	Silstone, sandstone as above, argillaceous limy trace pyrite no show.

DEKALB NO. 5 UTE TRAIL UNIT

6138-39	Siltstone, sandstone as above argillaceous limy trace pyrite, no show.
6139-40	Siltstone, sandstone, green, gray-green, very fine grained, calcareous to limy, very argillaceous slightly micaceous very scattered light black flecks, weak trace pyrite, no show.
6140-50	Siltstone, sandstone, very light ot dark gray, very fine to medium grained, angular to sub-angular rounded, clear frosted with coarse occasional light pink very light orange quartz grain, weak trace gray, to black chert grains, slightly micro-micaceous, calcareous kaolinitic, slightly argillaceous very firm tite, trace pyrite trace silty streaks trace shale green, gray-green, green-red, red-brown rusty-red, meta-bentonite slightly silty.
6150-60	Sandstone, white, very light gray-white, very light green-white, angular to sub-rounded, clear frosted, with occasional light orange,pink and amber quartz grains, trace gray to black chert, slightly micaceous, calcareous kaolinitic, firm, tite to trace friable with scattered very poor porosity, no show trace pyrite.
6160-70	Sandstone as above with trace varicolored shale.
6170-80	Shale, gray-green, green, green-red, red-brown purple-red, trace yellow olive, meta-bentonite, slightly calcareous with very scattered silty streaks trace sandstone as above.
6180-90	Siltstone, sandstone and shale as above.
6190-6200	Siltstone, sandstone with trace shale as above.
6200-10	Siltstone, sandstone with shale as above.
6210-20	Interbedded shale siltstone, and sandstone as above.
6220-28	Shale rusty-red, red-purple, green-red, green, gray-green, black meta-bentonite sub-waxy lustre, slightly calcareous, with scattered silty streaks.
6228-30	Sandstone, white, very light green-white, very light gray, fine to medium grained, angular to sub-rounded, clear, frosted with occasional very light pink, very light orange amber quartz grain with occasional black and gray chert grains, slightly micaceous calcareous, kaolinitic trace light green, interstitial clay firm tite with trace friable, streaks, very scattered very poor porosity slightly gas kick from mud, trace shale as above.
6230-36	Sandstone as above with trace shale slightly gas kick from mud.
6230-40	Sandstone as above with trace sahle trace gypsum.
6240-46	Sandstone as above with trace shale and trace gypsum.
6246-50	Sandstone as above with trace shale.

6250-60	Sandstone, white, very light gray, very light green-white, fine to medium grained, white, angular to sub-rounded, clear frosted, with very scattered trace very light pink, very light orange, very light amber quartz grains, very scattered trace gray to black chert grains, slightly micro-micaceous, slightly calcareous kaolinitic trace very light green interstitial clay flecks, firm to friable, with scattered very poor to poor porosity, fair gas kick in mud, trace shale with gypsum. (cavings?)
6260-63	Sandstone as above with red-brown, purple-red, green-red, gray-green shale.
6263-70	Siltstone, sandstone as above with fair trace shale.
6270-75	Shale, red-brown, purple-red, green, gray-green, red-green, oliver green, sub-waxy meta-bentonite, slightly calcareous firm, blocky with scattered silty streaks.
6275-80	Shale as above with scattered silty and sandy streaks, trace limestone nodules weak trace gypsum.
6280-85	Shale as above with fair trace interbedded siltstone, sandstone, white, very light green-white, light gray very fine to medium fine grained, calcareous kaolintic, slightly micaceous, firm, tite.
6285-90	Shale as above increase green shale, with trace siltstone, and sandstone as above.
6290-6300	Shale as above with trace siltstone, sandstone, as above with argillaceous and limy streaks.
6300-10	Shale as above with fair trace siltstone, sandstone, white very light green, white, very light gray, very fine to medium fine grained, angular to sub-rounded slightly micaceous, calcareous kaolinitic, firm to friable with scattered very poor to poor porosity.
6310-20	Shale, varicolored as above with trace siltstone and sandstone as above.
6320-30	Shale varicolored as above with trace silt and sandstone as above trace limestone nodules.
6330-40	Shale as above increase in gray to black shale, trace siltstone and sandstone as above.
6340-50	Shale, gray, gray-green, red-green, trace red-brown, meta-bentonite, slightly calcareous with scattered silty and sandy inclusions.
6350-60	Shale as above with fair trace silt and sandstone, light green, very light gray-green, light green-white, very fine to medium grained, calcareous, kaolintic.
6360-66	Sandstone, white, very light green-white, very light gray, fine to medium grained, angular to sub-angular, clear, frosted with very scattered very light orange very light pink, very light amber and with scattered light to dark gray, black chert, slightly micro-micaceous, scattered trace light green interstitial clay flecks, calcareous kaolinitic, firm tite to friable with scattered very poor porosity very slight gas kick in mud. trace shale as above.

6366-70	Sandstone as above with copious trace shale.
6370-80	Sandstone as above with very poor to poor porosity, trace shale as above.
6380-85	Sandstone as above with poor porosity to fair porosity shale as above.
6385-90	Sandstone as above with increase in light green argillaceous material with good trace shale reds, yellows, and greens meta-bentonite, sub-waxy slightly calcareous.
6390-6400	Shale varicolored as above with trace blacks with trace siltstone, sandstone.
6400-10	Shale, varicolored as above predominate greens and reds.
6410-20	Shale as above with weak trace sandstone, white, fine grained calcareous kaolinitic.
6420-30	Shale as above with moderate trace sandstone white, very light green-white, fine to medium grained, micaceous, calcareous kaolinitic, very firm, tite.
6430-40	Shale as above with sandstone as above.
6440-50	Shale and Interbedded sandstone as above with decrease in sandstone.
6450-60	Shale as above with moderate trace siltstone, sandstone white, light green-white, very light gray very fine to fine grained, slightly micaceous, with scattered argillaceous streaks, calcareous kaolinitic streaks.
6460-70	Shale as above with trace siltstone and sandstone.
6470-80	Shale, dark red-purple, purple-red, brown-red, green-red, green-purple, gray-green, green, sub-waxy meta-bentonite, with trace siltstone, sandstone white, lavendar very light purple, very fine to medium grained, calcareous slightly micaceous, kaolinitic hard, tite.
6480-90	Shale as above with trace very dark gray shale, trace siltstone, sandstone as abovetrace limestone concrete.
6490-6500	Shale as above with trace siltstone, sandstone, trace limestone varicolored concrete.
6500-06	Interbedded shale, and sandstone as above trace limestone varicolored concrec.
6506	Interbedded shale and sandstone as above with decrease in sandstone trace soft buff, bentonite shale.

T. D. Driller 6510' (SLM)
Schlumberger 6512'

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LEASE NUMBER
UNIT Ute Trail Unit

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* Uintah *Field* Wildcat

The following is a correct report of operations and production (including drilling and producing wells) for the month of January 20, 1960.

Agent's address Box 523
Vernal, Utah
Phone 1073

Company DeKalb Agricultural Assn., Inc.
Signed [illegible]
Agent's title Manager

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)
NENE 8	10S	22E	1	-0-	-0-	-0-	-0-	-0-	-0-	Shut In
NENE 17	10S	22E	2	-0-	-0-	-0-	-0-	-0-	-0-	Abandoned
NENE 16	10S	22E	3	-0-	-0-	-0-	-0-	-0-	-0-	Shut In
NENE 27	9S	20E	4	-0-	-0-	-0-	-0-	-0-	-0-	Shut In
NENE 23	9S	20E	5	-0-	-0-	-0-	-0-	-0-	-0-	Shut In
NENE 24	9S	20E	6	-0-	-0-	-0-	-0-	-0-	-0-	Shut In
NENE 4	10S	22E	7	-0-	-0-	-0-	-0-	-0-	-0-	Shut In
NWNW 22	10S	22E	8	-0-	-0-	-0-	-0-	-0-	-0-	Shut In

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.

Form 9-329
(January 1950)

16—25766-8 U. S. GOVERNMENT PRINTING OFFICE

Form OGCC-1 a

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☒ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ OTHER SINGLE ZONE ☐ MULTIPLE ZONE ☒

2. NAME OF OPERATOR: Gas Producing Enterprises Inc.

3. ADDRESS OF OPERATOR: PO Box 628, Vernal, Utah 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 655' FNL & 1045 FEL, Sec. 23
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0577-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Natural Buttes

8. FARM OR LEASE NAME:

9. WELL NO.: 7

10. FIELD AND POOL, OR WILDCAT: Bitter Creek

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 23, T 9S, R 20E, SLM

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 5 mi. SE Ouray, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. line, if any): 655'

16. NO. OF ACRES IN LEASE: 1440

17. NO. OF ACRES ASSIGNED TO THIS WELL: 640

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 10,000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4835 GR

22. APPROX. DATE WORK WILL START*: 6-25-70

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
	13 3/8	48	315	325 sx
	7	23	6508	1100 sx
6 1/4	4 1/2	11.6	10000	1000 sx

This well is formerly known as the Tenneco Oil Co. Ute Trail No. 5. Gas Producing Enterprises, Inc. has purchased this non-producing well for the purposes of deepening to 10,000'.

APPROVED BY DIVISION OF
OIL & GAS CONSERVATION

DATE 6-17-70

BY Cleon B Feight

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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.

24.

SIGNED J.R. Curtsinger TITLE Division Manager DATE June 15, 1970

J.R. Curtsinger

(This space for Federal or State office use)

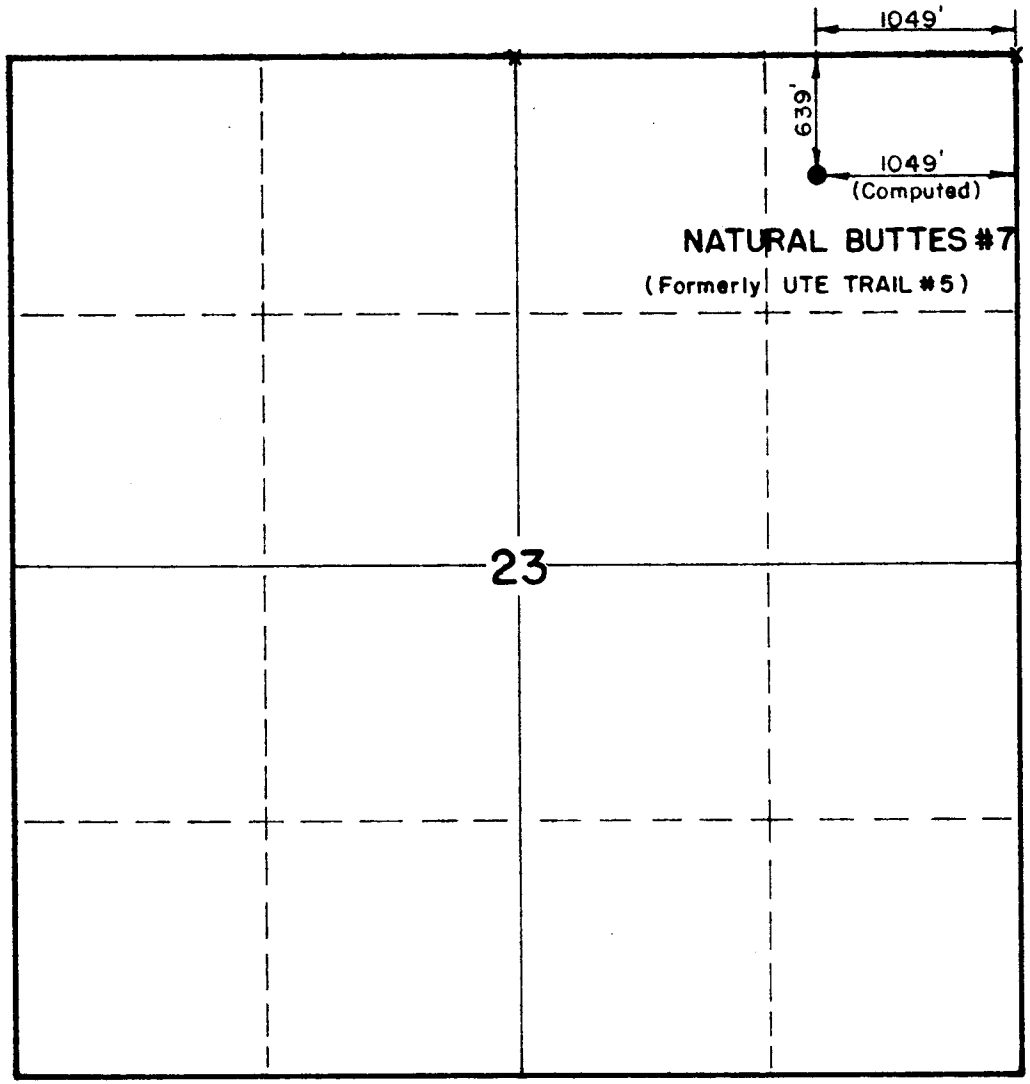
PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

T9S, R20E, SLB&M



X = Corners Located (Brass Caps)

PROJECT

GAS PRODUCING ENTERPRISES

GAS WELL LOCATED AS SHOWN IN THE NE 1/4 NE 1/4, SECTION 23, T9S, R20E, SLB&M. UINTAH COUNTY, UTAH.

N

CERTIFICATE

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

Dean Stewart

REGISTERED LAND SURVEYOR
REGISTRATION No 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P.O. BOX Q – 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 25 June 1970
PARTY GS-MS-RK	REFERENCES GLO Corners
WEATHER Clear & Hot	FILE GAS PRODUCING ENT.

Depths of fresh-water zones:

Gas Producing Enterprises, Inc., Natural Buttes Unit #7, Bitter Creek Field

1,320' fsl, 1,320; fel, sec. 3, T.10 S., R.21 E., SLBM, Uintah Co., Utah

Elev. (4,950 ft), test to 10,000 ft

Casing proposed to 10,000 ft

Formation tops, approx.:

Uinta Fm	surface
Green River Fm	1,700 ft
Wasatch Fm	4,800 ft
Mesaverde Grp	8,000 ft
Mancos Sh	10,300 ft

There are no water wells on record in the near vicinity of the proposed test. A deep well about 2 miles southwest of this site produced useable water (brackish to saline) from about 3,500 ft. Useable water may occur as deep at this location.

CTS
6-9-70

2. Fresh Water Sands (continued) -

There are no water wells on record in the near vicinity of the proposed test. A deep well about 2 miles southwest of this site produced usable water (brackish to saline) from about 3,500 ft. Usable water may occur as deep at this location."

3. Other Mineral Bearing Formations (continued) -

no higher than 40' above Mahogany. Therefore, the top of the rich oil shale sequence at this location should be at a depth of about 2,000 feet and extend to a depth of 2,075 feet. Cashion's map shows this location to be underlain by 75 feet of beds that will yield 25 gallons of shale oil per ton. Also, Cashion states that above the Mahogany bed are 800 feet of strata that may contain pods and beds of saline minerals.

This location is also in an area considered prospectively valuable for solid and semi-solid bitumens. Several gilsonite veins strike across this township from northwest to southeast.

GAS PRODUCING ENTERPRISES, INC.
P. O. Box 628
Vernal, Utah 84078

June 17, 1970

U.S. Department of the Interior
Geological Survey
Branch of Oil & Gas Operations
8416 Federal Building, 125 S. State Street
Salt Lake City, Utah 84111

State of Utah, Department of Natural Resources
Division of Oil & Gas Conservation
1588 West North Temple
Salt Lake City, Utah 84116

Re: Natural Buttes, Well No. 7
Sec. 23, T 9S, R 20E, SLM
Bitter Creek Field, Uintah County, Utah

Dear Sirs:

Please find attached "Application for Permit to Deepen" our Natural Buttes Well No. 7. This well was formerly known as the Ute Tribal No. 5 and operated by the Tenneco Oil Co. This well will replace the application to drill the Natural Buttes #7 which was located in Section 3, T 10S, R 21E and recently approved by your office.

We will change our records to reflect the proposed well in Sec. 3, hereinafter known as the Natural Buttes #8.

This will conform to the existing plan of development as filed with the U.S.G.S. office in Casper.

Very truly yours,

GAS PRODUCING ENTERPRISES, INC.

J.R. Curtsinger

J.R. Curtsinger
Division Manager

JRC:lj

Attach. (3)

GAS PRODUCING ENTERPRISES, INC.
P. O. Box 628
Vernal, Utah 84078

June 26, 1970

U.S. Department of the Interior
Geological Survey
Branch of Oil & Gas Operations
8416 Federal Building, 125 S. State Street
Salt Lake City, Utah 84111

State of Utah, Department of Natural Resources
Division of Oil & Gas Conservation
1588 West North Temple
Salt Lake City, Utah 84116

Re: Natural Buttes, Well No. 7
Sec. 23, T 9S, R 20E, SLM
Bitter Creek Field, Uintah County, Utah

Dear Sirs:

Please find attached Plat correcting location of subject well as originally submitted to you under date of June 17, 1970 with Application for Permit to Deepen".

Very truly yours,

GAS PRODUCING ENTERPRISES, INC.

J.R. Curtsinger

J.R. Curtsinger
Division Manager

JRC:lj

Attach. (1)

Form OGCC-1 b

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [ ] GAS WELL [X] OTHER

2. NAME OF OPERATOR: Gas Producing Enterprises, Inc.

3. ADDRESS OF OPERATOR: PO Box 628, Vernal, Utah 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface

639' FNL & 1049' FEL, Sec. 23

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0577-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Natural Buttes

8. FARM OR LEASE NAME:

9. WELL NO.: 7

10. FIELD AND POOL, OR WILDCAT: Bitter Creek, Ouray

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 23, T 9S, R 20E. SLM

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4835 GR

12. COUNTY OR PARISH:

13. STATE:

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]
(Other)			[ ]

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
(Other)			[ ]

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Drlg @ 6524' July 1, 1970 to 8297 TD on July 12, 1970

PBTD @ 7611', 2 7/8" tbg set @ 7611'

Rig released 7-18-70

Wait on rig from 7-18-70 thru 7-31-70.

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

SIGNED L R Curtsinger TITLE Division Manager DATE 8-22-70

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form OGCC-3

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0577-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Natural Buttes

8. FARM OR LEASE NAME:

9. WELL NO.: 7

10. FIELD AND POOL, OR WILDCAT: Bitter Creek, Ouray

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 23, T 9S, R 20E, SLM

1a. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

2. NAME OF OPERATOR: Gas Producing Enterprises, Inc.

3. ADDRESS OF OPERATOR: PO Box 628, Vernal, Utah 84078

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

At surface: 639' FNL, 1049' FEL, Sec. 23

At top prod. interval reported below: same

At total depth: same

14. PERMIT NO. / DATE ISSUED:

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
6-22-70	7-12-70	8-18-70	4935 GR	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
8297'	7611'		→	+ 1794'	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 7614'-8297'

25. WAS DIRECTIONAL SURVEY MADE:

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-CBL

27. WAS WELL CORED: no

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7"		6503'	8 3/4"		
2 7/8"	6.5	7614'	6 1/4"	600 sx	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
3 1/2" DP	7611'	7919'		

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

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

7892-93'; 7856-57'; 7822-23'; 7780-81'; 7760-61'; 7719-20'.

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7614-8297'	3000 gal. HF acid

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
8-18-70	flowing	producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8-12-70	24	12/64"	→	12	900	6	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1250#		→	12	900	6	56°

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Sold

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: J R Curtsinger TITLE: Division Manager DATE: 8-31-70

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

Form OGCC-3

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

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL XX DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL XX WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: GAS PRODUCING ENTERPRISES, INC.

3. ADDRESS OF OPERATOR: PO Box 628, Vernal, Utah 84078

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 639' FNL, 1049' FEL, Sec. 23
At top prod. interval reported below: same
At total depth:

5. LEASE DESIGNATION AND SERIAL NO.: Utah 0577-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Natural Buttes

8. FARM OR LEASE NAME:

9. WELL NO.: 7

10. FIELD AND POOL, OR WILDCAT: Bitter Creek - Ouray

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 23, T 9S, R 20E, SLM

14. PERMIT NO. / DATE ISSUED:

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

15. DATE SPUDDED: 6-22-70
16. DATE T.D. REACHED: 7-12-70
17. DATE COMPL. (*Ready to prod.*): 8-18-70
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 4935' GR
19. ELEV. CASINGHEAD:
20. TOTAL DEPTH, MD & TVD: 8297'
21. PLUG, BACK T.D., MD & TVD:
22. IF MULTIPLE COMPL., HOW MANY*:
23. INTERVALS DRILLED BY: →
ROTARY TOOLS: 1794'
CABLE TOOLS:

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 7614-8297' - Wasatch Mesaverde

25. WAS DIRECTIONAL SURVEY MADE: no

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-CBL

27. WAS WELL CORED: no

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7"		6503'	8 3/4"		
2 7/8"	6.5#	7614'	6 1/4"	600 sx	
3 1/2" (DP)	13.3#	7919 - 7614'	6 1/4"		

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)
7892-93; 56-57; 22-23; 7780-81; 60-61; 19-20'
(1 jet shot per foot)
7562-66; 46-48; 18-20; 00-02; 7474-80; 50-56;
26-30; 7384-88; 28-32; 00-04; 7260-64; 24-30;
02-04; 7194-96; 84-86; 42-44; 18-20; 7082-84;
34-38; 10-12; 6914-18; 6692-96; 72-76; 6534-36 (1 SPF)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7614-8297'	3000/G HF acid
6534-7566'	5000/G HCl acid

33.* PRODUCTION

DATE FIRST PRODUCTION: 8-18-70
PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*): Flowing
WELL STATUS (*Producing or shut-in*): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8-12-70	24	12/64"	→	12	900	6	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→	12	900	6	56°

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Sold

TEST WITNESSED BY:

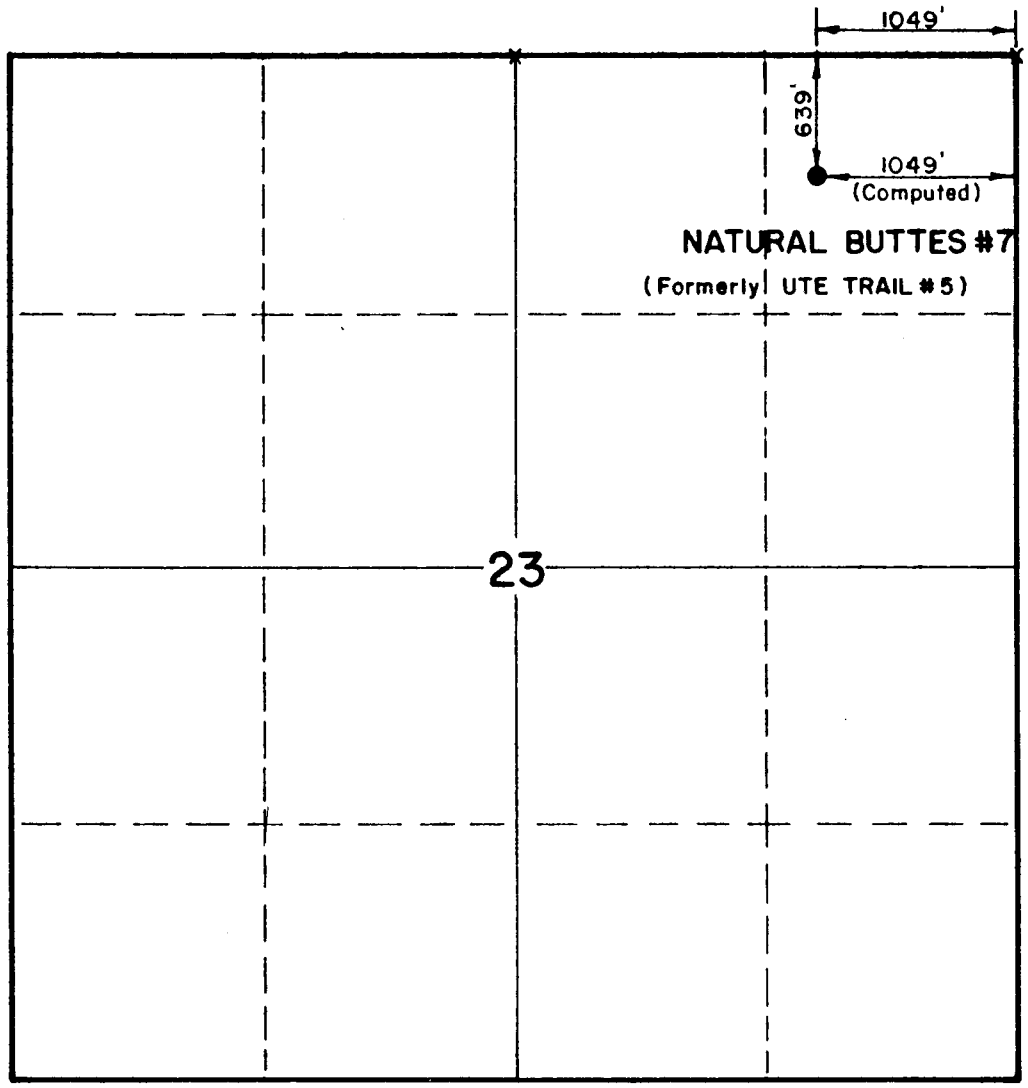
35. LIST OF ATTACHMENTS:

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

SIGNED: J R Curtsinger TITLE: Division Manager DATE: 10-20-70

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

T9S, R20E, SLB&M



X = Corners Located (Brass Caps)

PROJECT

GAS PRODUCING ENTERPRISES

GAS WELL LOCATED AS SHOWN IN THE NE 1/4 NE 1/4, SECTION 23, T9S, R20E, SLB&M. UINTAH COUNTY, UTAH.

N

CERTIFICATE

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

Dave Stewart

REGISTERED LAND SURVEYOR
REGISTRATION Nº 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P O BOX Q — 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 25 June 1970
PARTY GS-MS-RK	REFERENCES GLO Corners
WEATHER Clear & Hot	FILE GAS PRODUCING ENT.

Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE .....
LEASE NUMBER U-0577A
UNIT Natural Buttes

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* Uintah *Field* Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of June, 1973,

Agent's address P. O. Box 1138 *Company* Gas Producing Enterprises, Inc.

Vernal, Utah 84078 *Signed* J. R. Helbson

Phone 789-4433 *Agent's title* Area Clerk

Sec. and ¼ or 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)
NON-PARTICIPATING										
23 NENE	9S	20E	NB 7							SI

NOTE.—There were ..... runs or sales of oil; ..... M cu. ft. of gas sold; ..... 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.

Form 9-329
(January 1950)

16—25766-9 U. S. GOVERNMENT PRINTING OFFICE

GPO 837-062

RECEIVED
DEC 9 1975

Form approved.
Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE
LEASE NUMBER U-0577A
UNIT Natural Buttes

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* Uintah *Field* Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of July, *19* 75, Natural Buttes 7

Agent's address P. O. Box 1138 *Company* Gas Producing Enterprises, Inc.
Vernal, Utah 84078 *Signed* [signature]

Phone 789-4433 *Agent's title* Production Clerk

Sec. and ¼ or 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)
NON-PARTICIPATING										
NENE 23	9S	20E	7							SI Indefinitely

NOTE.—There were ..... runs or sales of oil; ..... M cu. ft. of gas sold;
..... 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.

FORM OGC-5

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS CONSERVATION
MONTHLY OIL AND GAS CONSERVATION LEVY REPORT

Oil and Gas Report for the month of: August 19 75 Report of: Gilman A. Hill (Name of Individual or Company)

Name of Lease or Unit: Old Squaw's Crossing Lease #U-013769-C Address: 6200 Plateau Drive, Englewood, Colorado 80110

Field or Pool: Old Squaw's Crossing County: Uintah Phone No: (303) 771-1101

OSC Unit #1 Well
SE Unit #1 Well
SE 1/4, NW 1/4 of Sec. 17, T. 10S, R 20E, SLM

(1)	(2)	(3)	(4)	(5)			(6)	(7)	(8)	(9)
Product	Sales In Barrels or MCF	Market Value per barrel or MCF	Gross Market Value	Royalties Due or Paid			Amount used in producing, Repressuring or Recycling operations ($)	Total Amount Assessable (Col. 4 less Col. 5 & 6)	Levy 1 1/2 Mills on $ Value	Amount Due DOGC
				U.S.Gov't	State	Indian				
GAS	None								X$.0015	$ None
CRUDE OIL	None	Well temporarily shut in.							X$.0015	$ None
Other Hydro carbons	None								X$.0015	$ None

TOTAL AMOUNT DUE THE DIVISION OF OIL AND GAS CONSERVATION ..... $

*Other Hydrocarbons Produced at Well in Liquid Form

By Gilman A. Hill

Gilman A. Hill, Lease Operator
(Title)

September 24, 1975
(Date)

INSTRUCTIONS: Complete this form in triplicate and mail 2 copies to the Division of Oil and Gas Conservation, 1588 West North Temple, Salt Lake City, Utah, 84116, together with your check, which should be made payable to the Division of Oil and Gas Conservation.

Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE
LEASE NUMBER U-0577A
UNIT Natural Buttes

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* Uintah *Field* Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of March, 1976, Natural Buttes 7

Agent's address P. O. Box 1138 *Company* Gas Producing Enterprises, Inc.

Vernal, Utah 84078 *Signed* [illegible]

Phone 789-4433 *Agent's title* Production Clerk

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)
NON-PARTICIPATING										
NENE 23	9S	20E	7							SI Indefinitely
						Uneconomical				

RECEIVED MAY 3 1976

NOTE.—There were ..... runs or sales of oil; ..... M cu. ft. of gas sold; ..... 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.

Form 9-329
(January 1950)

16—25766-9 U. S. GOVERNMENT PRINTING OFFICE

GPO 837-092

Form approved.
Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
JUN 3 1976
DIVISION OF OIL, GAS, & MINING

LAND OFFICE .....
LEASE NUMBER U-0577A
UNIT Natural Buttes

LESSEE'S MONTHLY REPORT OF OPERATIONS

P

State Utah County Uintah Field Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of April, 19 76, Natural Buttes 7

Agent's address P. O. Box 1138 Company Gas Producing Enterprises, Inc.
Vernal, Utah 84078 Signed D. W. Hodge
Phone 789-4433 Agent's title Production Clerk

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)
NON-PARTICIPATING										
NENE 23	9S	20E	7				Uneconomical			SI Indefinitely

NOTE.—There were ..... runs or sales of oil; ..... M cu. ft. of gas sold; ..... 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.

Form 9-329
(January 1950)

16—25756-9 U. S. GOVERNMENT PRINTING OFFICE

GPO 837-082

Form approved.
Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE .....
LEASE NUMBER U-0577A
UNIT Natural Buttes

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* Uintah *Field* Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of June, 19 76, Natural Buttes 7

Agent's address P. O. Box 1138 *Company* Gas Producing Enterprises, Inc.
Vernal, Utah 84078 *Signed* H. W. Hodge

Phone 789-4433 *Agent's title* Production Clerk

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)
NON-PARTICIPATING										
NENE 23	9S	20E	7	-0-		Uneconomical				SI Indefinitely

NOTE.—There were ..... runs or sales of oil; ..... M cu. ft. of gas sold; ..... 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.

Form 9-329
(January 1950)

16—25766-9 U. S. GOVERNMENT PRINTING OFFICE

GPO 837-082

Form approved.
Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE .....
LEASE NUMBER U-0577A
UNIT Natural Buttes

RECEIVED
JAN 3 1977
DIVISION OF
GAS, & MINING

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Uintah *County* Utah *Field* Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of October, *19* 76, Natural Buttes # 7

Agent's address P. O. Box 749 *Company* Gas Producing Enterprises, Inc.

Denver, Colorado 80201 *Signed* [illegible]

Phone (303) 572-1121 *Agent's title* Administrative Supervisor

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)
NON-PARTICIPATING										
NENE 23	9S	20E	7	-0-						SI Indefinitely Well Uneconomical

DISPOSITIONS:

OIL	
On hand at beginning of month	-0-
Produced during month.....	-0-
Sold during month.....	-0-
Unavoidably lost.....	-0-
Reason:.....	
On hand at end of month.....	-0-
GAS	
Sold.....	-0-
Flared/Vented.....	-0-
Used On/Off Lease.	-0-
WATER	
Pit.....	-0-
Injected..	-0-
Trucked...	-0-
Other.....	-0-

NOTE.—There were zero runs or sales of oil; zero M cu. ft. of gas sold; ..... 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.

Form 9-329
(January 1950)

16—25766-9 U. S. GOVERNMENT PRINTING OFFICE

Form approved.
Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE .....
LEASE NUMBER U-0577A
UNIT Natural Buttes

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Uintah *County* Utah *Field* Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of November, 1976, Natural Buttes # 7

Agent's address P. O. Box 749 *Company* Gas Producing Enterprises, Inc.

Denver, Colorado 80201 *Signed* H. W. Hodge

Phone (303) 572-1121 *Agent's title* Administrative Supervisor

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)
NON-PARTICIPATING										
NENE 23	9S	20E	7	-0-	-0-	—	-0-	—	-0-	SI Indefinitely Well Uneconomical

DISPOSITIONS:

OIL

On hand at beginning of month	-0-
Produced during month	-0-
Sold during month	-0-
Unavoidably lost	-0-
Reason:	
On hand at end of month	-0-

GAS

Sold	-0-
Flared/Vented	-0-
Used On/Off Lease	-0-

WATER

Pit	-0-
Injected	-0-
Trucked	-0-
Other	-0-

NOTE.—There were zero runs or sales of oil; zero M cu. ft ..... 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 duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

Form 9-329 16—25766-9 U. S. GOVERNMENT PRINT.

Form approved.
Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE .....
LEASE NUMBER U-0577A
UNIT Natural Buttes

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Uintah *County* Utah *Field* Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of January, *19*77, Natural Buttes # 7

Agent's address P. O. Box 749 *Company* Gas Producing Enterprises, Inc.

Denver, Colorado 80201 *Signed* [illegible]

Phone (303) 572-1121 *Agent's title* Administrative Supervisor

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)
NON-PARTICIPATING										
NENE 23	9S	20E	7	-0-	-0-	—	-0-	—	-0-	SI Indefinitely Well Uneconomical

DISPOSITIONS:

OIL	
On hand at beginning of month	-0-
Produced during month	-0-
Sold during month	-0-
Unavoidably lost	-0-
Reason:	
On hand at end of month	-0-
GAS	
Sold	-0-
Flared/Vented	-0-
Used On/Off Lease	-0-
WATER	
Pit	-0-
Injected	-0-
Trucked	-0-
Other	-0-

NOTE.—There were zero runs or sales of oil; zero M cu. ft. of gas sold; ..... 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.

Form 9-329
(January 1950)

16—25766-9 U. S. GOVERNMENT PRINTING OFFICE

GPO 837-082

Form approved.
Budget Bureau No. 42-R356.5.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LAND OFFICE .....
LEASE NUMBER U-0577A
UNIT Natural Buttes

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Uintah *County* Utah *Field* Natural Buttes

The following is a correct report of operations and production (including drilling and producing wells) for the month of April, 1977, Natural Buttes # 7

Agent's address P. O. Box 749 *Company* Gas Producing Enterprises, Inc.

Denver, Colorado 80201 *Signed* .....

Phone (303) 572-1121 *Agent's title* Administrative Supervisor

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)
NON-PARTICIPATING										
NENE 23	9S	20E	7							SI Indefinitely Well Uneconomical

DISPOSITIONS:

OIL	
On hand at beginning of month	-0-
Produced during month.....	-0-
Sold during month.....	-0-
Unavoidably lost.....	-0-
Reason:.....	
On hand at end of month.....	-0-
GAS	
Sold.....	-0-
Flared/Vented.....	-0-
Used On/Off Lease.	-0-
WATER	
Pit.....	-0-
Injected..	-0-
Trucked...	-0-
Other.....	-0-

NOTE.—There were zero runs or sales of oil; zero M cu. ft. of gas sold; ..... 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.

Form 9-329
(January 1950)

16—25766-9 U. S. GOVERNMENT PRINTING OFFICE

GPO 837-082

DEPARTMENT OF THE INTERIOR (Reverse side)

GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: UTAH 0577-A

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

1. OIL WELL [ ] GAS WELL [X] OTHER

7. UNIT AGREEMENT NAME: NATURAL BUTTES UNIT

2. NAME OF OPERATOR: GAS PRODUCING ENTERPRISES, INC.

8. FARM OR LEASE NAME: NATURAL BUTTES UNIT

3. ADDRESS OF OPERATOR: P. O. BOX 749, DENVER, CO 80201

9. WELL NO.: NATURAL BUTTES UNIT NO. 7

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 639' FNL & 1049' FEL SECTION 23-T9S-R20E

10. FIELD AND POOL, OR WILDCAT: BITTER CREEK FIELD

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SECTION 23-T9S-R20E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4935' KB

12. COUNTY OR PARISH: UINTAH

13. STATE: UTAH

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other)		SEE BELOW	[X]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

PERMISSION IS REQUESTED TO ABANDON THE UNECONOMICAL WASATCH-MESAVERDE. AN ATTEMPT WILL BE MADE FOR A WILDCAT GREEN RIVER COMPLETION AT APPROXIMATELY 3800' IN ORDER TO EVALUATE A NEW HORIZON IN THE BITTER CREEK FIELD.

RECEIVED MAR 30 1978 DIVISION OF OIL, GAS, & MINING

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING

DATE: 4-4-78

BY: C.B. Feight

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

SIGNED F. R. Midkiff by R.S. Merrill TITLE Acting Dist. Supt. DISTRICT SUPERINTENDENT DATE MARCH 28, 1978

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

(May 1963)

DEPARTMENT OF THE INTERIOR (Other instructions on reverse side)

GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: UTAH 0577-A

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

1. OIL WELL [ ] GAS WELL [X] OTHER

7. UNIT AGREEMENT NAME: NATURAL BUTTES UNIT

2. NAME OF OPERATOR: GAS PRODUCING ENTERPRISES, INC.

8. FARM OR LEASE NAME: NATURAL BUTTES UNIT

3. ADDRESS OF OPERATOR: P. O. BOX 749, DENVER, CO 80201

9. WELL NO.: NATURAL BUTTES UNIT NO. 7

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 639' FNL & 1049' FEL SECTION 23-T9S-R20E

10. FIELD AND POOL, OR WILDCAT: BITTER CREEK FIELD

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SECTION 23-T9S-R20E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4935' KB

12. COUNTY OR PARISH: UINTAH

13. STATE: UTAH

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other)		SEE BELOW	[X]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

PERMISSION IS REQUESTED TO ABANDON THE UNECONOMICAL WASATCH MESAVERDE PORTION OF THIS WELL AND TO ATTEMPT A WILDCAT GREEN RIVER COMPLETION. THE PROCEDURE IS AS FOLLOWS:

(1) MI WORKOVER RIG ON 5-7-78
(2) CUT TBG @ ±5600'. POOH
(3) SET CIBP @ 4000'. DUMP 5 SACKS CMT ON TOP OF PLUG.
(4) PRESSURE TEST CSG AND PLUG TO 1800 PSIG W/FRESH WATER.
(5) PERF 3516' - 3015'. (Selected zones).
(6) PUT WELL ON PRODUCTION IF WELL WILL FLOW NATURALLY.
(7) MO WORKOVER RIG.
(8) ACIDIZE IF NECESSARY.
(9) FLOW TEST.
(10) PUT ON PRODUCTION.

SEE ATTACHED DOWNHOLE SCHEMATIC FOR PRESENT STATUS OF WELL.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: May 3, 1978
BY: [illegible]

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

SIGNED F.R. MIDKIFF TITLE DISTRICT SUPERINTENDENT DATE APRIL 27, 1978

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

NBU #7 (GPE)(WORKOVER)
Bitter Creek Field
Uintah County, Utah
AFE: WI:
ATD: 8297' SD:
GPE, Inc. , Oper.
Gibson Well Service,
13-3/8" @ 316'; 7" @ 6508'
Gros Perf Int: 6534'-7893'

5-16-78 MI Gibson Well Service.
NU BOP.

TD: 8247'
5-17-78 RU to RIH w/guage ring.
Pump 100 bbls 10# bring. Well dead. RU McCullough. TIH to 5600' to pull tbg. Ran free pt. Found tbg free @ 4445'. Cut off @ 4445'. Pull 1 jt & circ hole w/10# brine. LD total 8 jts. RU Halliburton. Pump 10 bbls H_2O + 50 sx Class "G" cmt. Finished TOOH w/tbg. SDON.

5-18-78 Prep to run CBL log & perf Green River formation.
RU McCullough. TIH w/gauge ring. Ran GR-CCL & set Baker CIBP @ 3900'. RIH w/bailer & dumped 5 sx cmt on top of BP. RD McCullough. Ran 50 jts 2-7/8" tbg & POOH - LD tbg. Howco press tested 7" csg to 1200# w/2% KCl wtr. SDFN. NOTE: Cmt plug in 7" csg from 4445 to 4200' (245' plug).

5-19-78 Prep to acidize Green River perf.
RU McCullough & ran CBL Log from 3900 to 2100'. Good bond. RU & perf 7" csg w/1 SPF @ 3015',3016', 3026', 3027', 3082', 3083', 3092', 3098', 3113', 3119', 3157',3158', 3303', 3304',3305', 3322', 3323', 3329', 3330', 3331', 3334', 3335',3375', 3414', 3415', 3515', 3516', total 27 holes. Perf depth - CBL Log. RD McCullough; PU RTTS Howco pkr & run on 2-7/8" EUE tbg. TIH & set pkr @ 2905'. ND tree; RU & swabbed 3 hrs; Rec 10 bbls load wtr w/5% Oil. Well kicked off & flowing w/FTP 200 psi on full 2" ck. After 1 hr - lite mist of wtr & est 200 MCFD. SI @ 7:30 PM, SITP 1500 psi @ 6 AM, 5-19-78.

TD: 8247'
PBTD: 3900'
5-20-78 RU Halliburton; Press test csg & tree to 4500# - held OK; Pump 10,000 gal 15% HCl acid w/1000 gal TR1S emulsifier; Drop 18 ball sealers; Good ball action - stopped balls @ 5000 gals due to inc press; Flushed to perfs w/2% KCl wtr; Total fluid 341 bbls; Avg injection rate 5 BPM; Avg treating rate 3700#; ISIP 900#, 5 min 800#, 15 min 800#; Well SI for 20 min; Open well to pit on 3/4" ck; Flowed back est 125 bbls load wtr; Swab well; Rec 225 bbls load wtr w/10% oil.

TD: 8247' Flowing to pit.
5-21-78 SITP 1400# . Open well to pit on 10/64" ck, FTP 500#. Est 350 MCFD - 75 BWPD.

5-22-78 Flowing to pit.
FTP 1000 psi, on 10/64" ck. Est 300 MCFD, w/50 BW.

5-23-78 Flowing to pit.
FTP 600#, on 18/64" ck.
100 MCFD w/150 to 200 BWPD.
Took wtr sample for analysis.

5-24-78 Prep to run Schl Spinner Survey.
Flowing to pit on 12/64" ck. FTP 500 psi, 150 MCFD w/50 to 75 BW & 1 to 2 BO - 16° API Gravity.
NOTE: Plan to move 3-Phase Production Unit w/De-hi from NBU #12.

NBU #7 (GPE) (WORKOVER)
Bitter Creek Field
Uintah County, Utah
AFE: WI:
TD: 8297' SD: 7-1-70
GPE, Inc., Oper.
Gibson Well Service, Contr.
13-3/8" @ 316'; 7" @ 6508'
Gross Perf Int: 6534'-7893'

5-25-78 RU Schl; Ran Gradiomonometer & Spinner Survey; FL @ 300'. Fluid entry interpretation tomorrow.

5-26-78 Flowing to pit - WO Gas Analysis from Mountain Fuel. FTP 650 psi, on 18/64" ck. Est 75 to 100 MCFD w/50 BW. Prod Equipt. installed - making pipeline connection today. Should have Gradiomonometer - Spinner Survey interpretation next week from Schl.

5-27-78 Flowing to pit.
FTP 550#, SICP 150#. Making 150 MCFD +250 BW.

5-28-78 FTP 550# on 16/64" ck to pit.
SICP 150#. Est 150 MCFD + 200 BWPD.

5-29-78 FTP 550# on 16/64" ck to pit, SICP 150#.
Est 150 MCFD + 200 BWPD.

5-30-78 Flow to pit.
100 MCFD, 600 FTP, 75 BWPD, on 12/64" ck.

5-31-78 Flow to pit.
100 MCFD, 600 FTP, 75 BWPD, on 12/64" ck.
Prep to MI & RU WO Rig to lower pkr for wtr shut off.

6-1-78 Prep to release tbg plug & move same down hole.
MI & RU Gibson Well Service.

6-2-78 SI to build up press.
RU WO Rig; Kill well w/100 bbls 10# brine; ND tree, NU BOP's; Release pkr @ 2905'; Move to 3280'; ND BOP's, NU tree; Swab, couldn't swab due to hvy oil in tbg; SDFN; SITP 100#, SICP 100#.

6-3-78 SITP 100#, SICP 200#.
Prep to open tbg to flow to pit.

6-4-78 Prep to RU Swab Unit.
Well dead - paraffined off.

6-5-78 Flowing to pit.
FTP 0, FCP 0, w/pkr, on 18/64" ck.
Prep to MI swab unit.

6-6-78 Prep to pump hot wtr to CO paraffin.
RU Gibson Well Service Swab Unit.
Cut paraffin from surface to 30'.

6-7-78 Well SI - WO pulling unit to pull pkr.

6-8-78 WO WO Rig.
Well dead.

6-9-78 RU Colorado Well Service - prep to TOOH w/pkr.
MI Colorado Well Service & spot rig.

6-10-78 MI Swab Rig
RU Colorado Well Service; Kill well w/80 bbls 10# brine; POOH; LD RTTS; Pkr rubbers OK; RU Model R-3, 7" Double grip pkr; Set @ 3188'; ND BOP, NU tree; Left open on 12/64" ck. Well Dead.

NBU #7 (GPE)(WORKOVER)
Bitter Creek Field
Uintah County, Utah
AFE: WI:
D: 8297' SD: 7-1-70
GPE, Inc., Oper. TD: 8247'
Gibson Well Service, Contr. PBTD: 3900'
13-3/8" @ 316'; 7" @ 6508'
Gross Perf Int: 6534'-7893'

6-11-78 SI
RU Swab Unit; Swab 31 BW from 3183', 1 run/hr, 3 BW/run; Last BF 60% oil; 44 BF total. Well Dead.

6-12-78 Prep to blow down & swab if necessary.
SITP 1450#.

6-13-78 Well flowing to pit.
FTP 50 psi, w/pkr, on 12/64" ck; Gas - TSTM.
Opened well to pit; Swabbed 8 BF in 7 hrs w/40% oil; RD Swab Unit & released; Measured up on well w/sinker bar w/PBTD @ 3900'.

6-14-78 Flowing to pit on 8/64" ck.
FTP 100#. Flowing est 25 BW + 2 - 3 BOPD + 50 MCFD.

6-15-78 Flowing to pit.
FTP 100#, on 14/64" ck.
Est 75 to 100 MCFD w/20 BWPD - oil stain.

6-16-78 Flowing to pit.
FTP 50#, w/prk, SICP 0#, on 8/64" ck.
Est 10 MCFD w/10 BW. Prep to SI well.

6-17-78 SI for evaluation.

6-18-78 SI for evaluation.
SITP 1200 psig, SICP 300 psig.

6-19-78 Well SI for evaluation.
SITP 1250 psi, w/pkr, SICP 300 psi.

6-20-78 SI for evaluation.
SITP 1250#.

6-21-78 SI for evaluation.
SITP 1300#, SICP 0#.

6-22-78 SI for evaluation.
SITP 1300#, SICP 0#.

6-23-78 SI for evaluation.
SITP 1300#, SICP 0#.

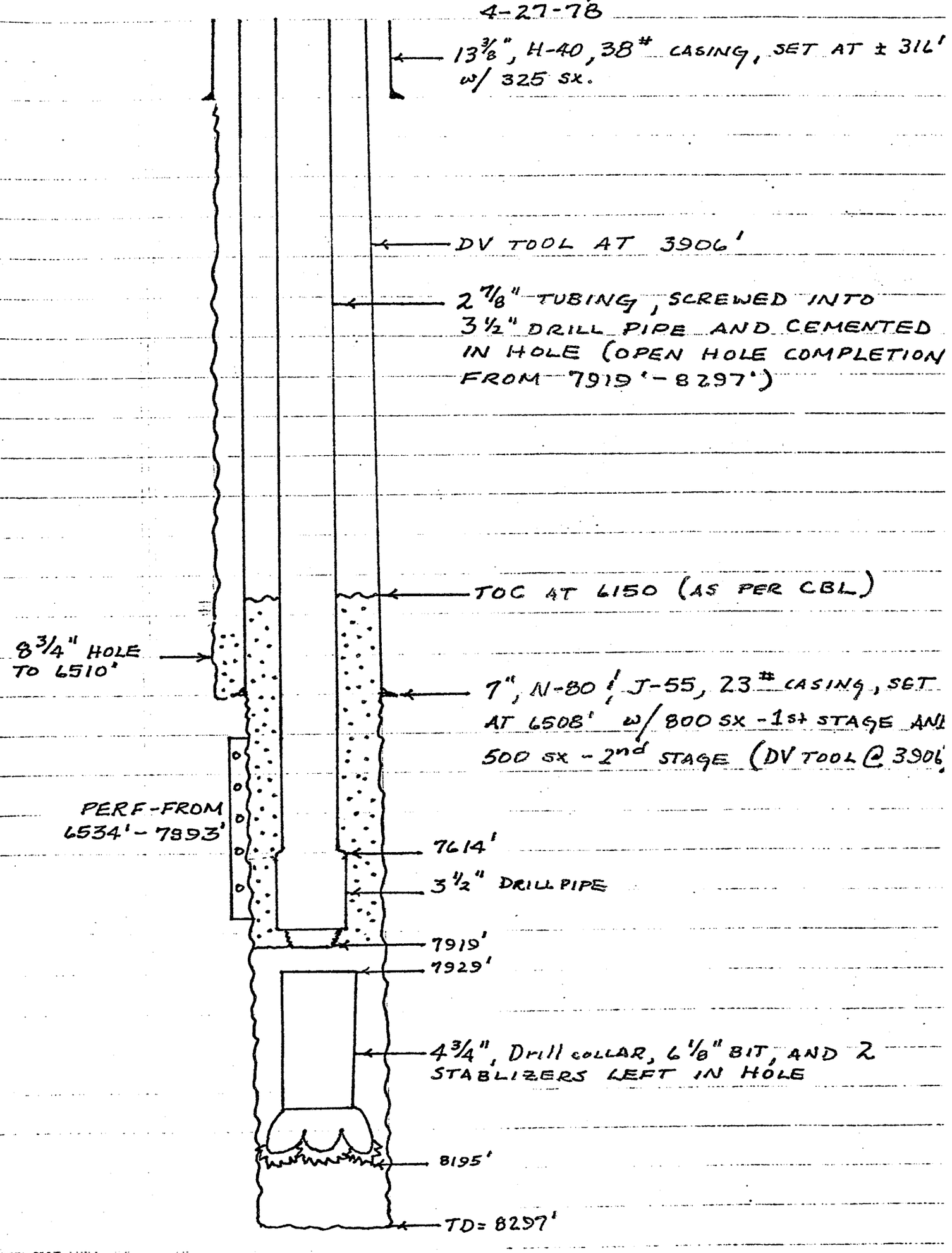
6-24-78 SI for evaluation.

6-25-78 SI for evaluation.

6-26-78 SI for evaluation.

6-27-78 SI for evaluation.
Transfer to back page.

DOWNHOLE SCHEMATIC
NATURAL BUTTES #7
NE NE SEC. 23, T9S, R20E
UINTAH CO., UTAH
4-27-78



DWH
4-27-78

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(See other instructions on reverse side)

Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [X] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

RECEIVED SEP 12 1979 DIVISION OF OIL, GAS, & MINING

2. NAME OF OPERATOR: GAS PRODUCING ENTERPRISES, INC.

3. ADDRESS OF OPERATOR: P. O. Box 749, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 639' FNL & 1049' FEL, Section 23, T9S, R20E
At top prod. interval reported below: Same
At total depth: Same

5. LEASE DESIGNATION AND SERIAL NO.: U-0577-A

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

7. UNIT AGREEMENT NAME: NATURAL BUTTES UNIT

8. FARM OR LEASE NAME: NATURAL BUTTES

9. WELL NO.: NATURAL BUTTES UNIT #7

10. FIELD AND POOL, OR WILDCAT: BITTER CREEK

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec 23, T9S, R20E

14. PERMIT NO. / DATE ISSUED:

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7-1-70	7-12-79	6-14-78	4935' KB	-----

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
8297'	3900'	*	→		N/A

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
3015' - 3516' Green River *(originally completed in Wasatch-unproductive)

25. WAS DIRECTIONAL SURVEY MADE: NO

26. TYPE ELECTRIC AND OTHER LOGS RUN: CBL, Spinner Survey

27. WAS WELL CORED:

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	38#	316'		325 sx	---
7"	23#	6503'	8-3/4"	1300 sx	---
4"					

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	2905'	2904'

31. PERFORATION RECORD (Interval, size and number) 1 SPF @
3015', 3016', 3026', 3027', 3082', 3083', 3092', 3098', 3113', 3119', 3157', 3158', 3335', 3375', 3414', 3515', 3516'
Total 27 holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3015-3516'	10,000 gals 15% HCl w/1000 gals Tris emulsifier, 18 ball sealers, flushed w/341 bbls 2% KCl.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
----	Flowing	SI - WO evaluation

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
6-14-78	72	8/64	→	0	50	23	-------

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
75	0	→	0	50	23	-------

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Vented

TEST WITNESSED BY: K. E. Oden

35. LIST OF ATTACHMENTS: Chronological of workover

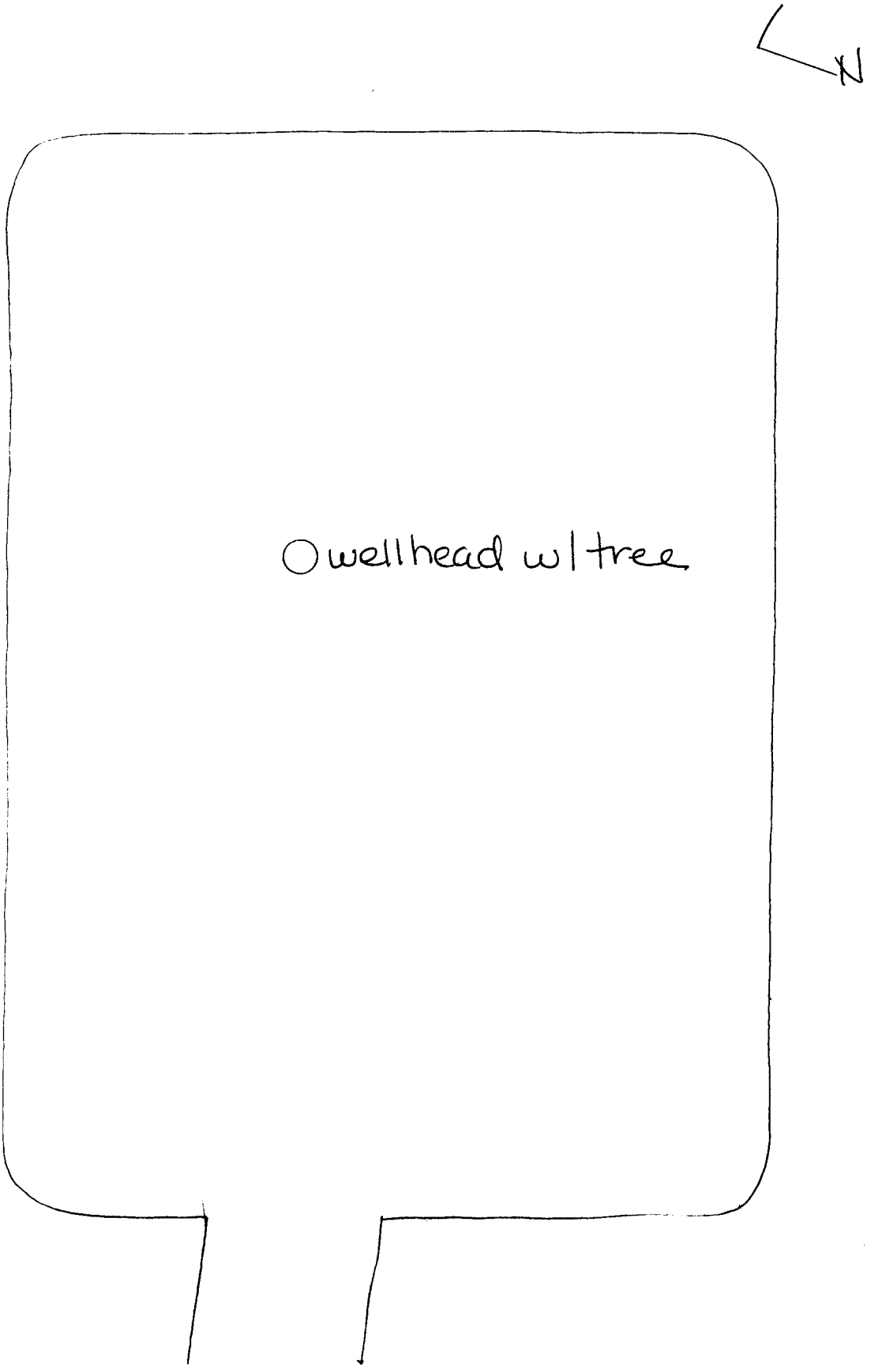
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED J. M. Stickland TITLE Area Engineer DATE September 10, 1979

J. M. Stickland

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

NBU #7 Sec 23, T9S, R20E Buckly 1/17/89



(Formerly 9-331) DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Utah 0577-A

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

DEC 04 1989
DIVISION OF OIL, GAS & MINING

1. OIL WELL [ ] GAS WELL [X] OTHER

2. NAME OF OPERATOR: Coastal Oil & Gas Corporation

3. ADDRESS OF OPERATOR: P.O. Box 749, Denver, CO 80201-0749

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 639' FNL, 1849' FEL

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Natural Buttes

8. FARM OR LEASE NAME:

9. WELL NO.: 7

10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 23-T9S-R20E

14. PERMIT NO.: 43-047-15379

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 4935' GR

12. COUNTY OR PARISH: Uintah

13. STATE: UT

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[X]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other)				(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS: (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

See attached intended plug and abandon procedures for the above referenced well. We are planning to plug twenty-two wells between December 1, 1989 and February 15, 1990. Your expediency in processing these sundry notices would be appreciated.

OIL AND GAS	
DRN	RJF
1-JRB ✓	GLH
DTS	SLS
2-TAS	
3- MICROFILM ✓	
4- FILE	

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

SIGNED Brenda W. Swank TITLE Regualtory Analyst DATE 11-29-89

(This space for Federal or State office use)

APPROVED BY _____ TITLE ACCEPTED BY THE STATE DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Federal approval of this action is required before commencing operations.

12-13-89
John R. Baza

*See Instructions on Reverse Side

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

P&A PROCEDURE

NBU #7
NATURAL BUTTES
UINTAH COUNTY, UTAH

WELL DATA

Location: 639' FNL & 1039' FEL, Sec. 23, T9S, R20E
Elevation: GL = 4835' KB = 4847'
TD: 8297' PBTD: 3850'
Casing: 13-3/8" H-40 38#, CSA 316', cmt w/325 sx
7" N-80 & J-55 23#, CSA 6503', cmt w/1300 sx
Tubing: 2-3/8" 4.7# tubing @ 2904'
Casing Properties:

Description	ID	Drift	Capacity	Burst	Collapse
7" N-80 23#	6.366	6.241	.0393 bbl/ft	6340	3830
7" J-55 23#	6.366	6.241	.0393 bbl/ft	4360	3270
2-3/8" 4.7#	1.995	1.901	.00387 bbl/ft		

Perforations: See attached perforation list.

PROCEDURE

1) MIRU well service company.

2) ND wellhead, NU BOPE. TOH and strap 2-3/8" tubing & packer.

3) TIH w/2-3/8" tubing open ended to 3600'. RU service company. Spot 250 sxs CL "G" cement @ 3600'.

4) Close in tubing-casing annulus. Pressure test 7" casing to 500 psi. If casing will not test, notify Denver office.

5) TOH w/tubing. ND BOPE, cut off casing. Spot 20 sx CL "G" cement plug at surface.

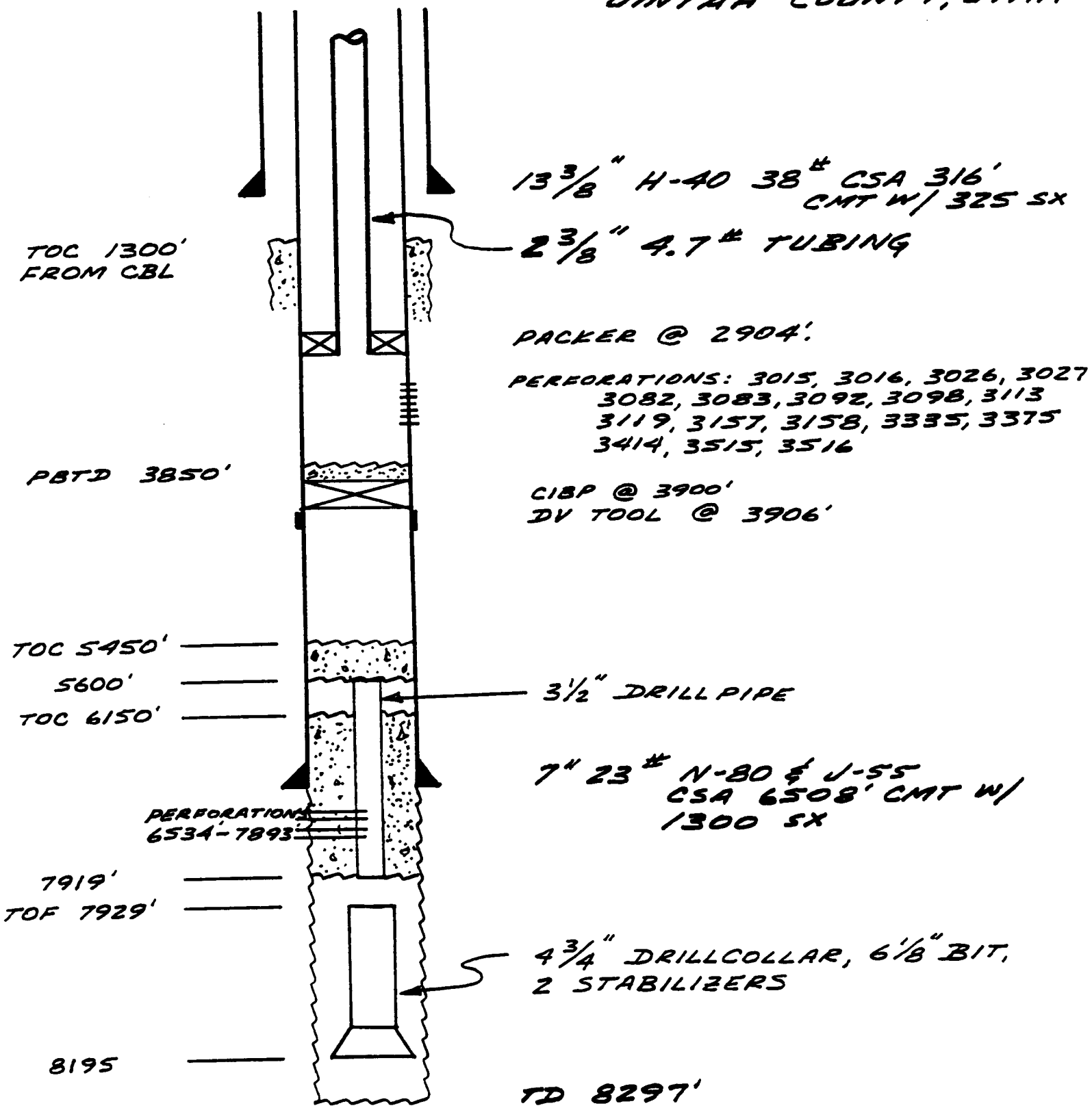
6) Weld on cap. Erect dry hole marker showing company name, well name, location and lease number.

NBU #7
UINTAH COUNTY, UTAH

LIST OF PERFORATIONS

Plugged Perforations			Open Perforations
7893	7450	7084	3516
7892	7430	7082	3515
7857	7426	7038	3414
7856	7388	7034	3375
7823	7384	7012	3335
7822	7332	7010	3158
7781	7328	6918	3157
7780	7304	6914	3119
7761	7300	6696	3113
7760	7214	6652	3098
7720	7260	6676	3092
7719	7230	6672	3083
7566	7224	6536	3082
7562	7204	6534	3027
7548	7202		3026
7546	7196		3016
7520	7194		3015
7518	7186		
7502	7184		
7500	7144		
7480	7142		
7474	7120		
7456	7118		

WELL SCHEMATIC
NBU #7
UINTAH COUNTY, UTAH



Form 3160-5
December 1989

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires September 30, 1990

5. Lease Designation and Serial No.
Utah 0577A

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

7. If Unit or CA, Agreement Designation
Natural Buttes Unit

8. Well Name and No.
Natural Buttes Unit #7

9. API Well No.
43-047-~~30084~~ 15379

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

11. County or Parish, State
Uintah County, Utah

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

JUN 25 1990

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Coastal Oil & Gas Corporation

3. Address and Telephone No.
P. O. Box 749, Denver, Colorado 80201-0749 (303) 573-4476

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
639' FNL & 1049' FEL (NENE)
Section 23, T9S-R20E

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☒ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other	

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

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

Above-referenced well P&A'd 6/13-14/90 as follows:

1) MIRU. ND WH. NU BOPE. POOH w/packer @ 3166'. RIH w/2-3/8" tbg. to 3601'. Spot 250 sxs Cl "G" cmt.

2) RIH. Tag cmt. @ 2331'. POOH to 1693'. Spot 25 sxs. Cl "G".

3) Perf 7" csg. @ 356'. Pump 125 sxs. Cl "G" + 3% CaCl. ND BOP. Cut off head. Pump 100 sxs. Cl "G" in 7" & 7" x 13-3/8" annulus. Weld on dry hole mark per BLM specifications. RD & MO.

4) Surface restoration to follow.

14. I hereby certify that the foregoing is true and correct
Signed Eileen Danni Hoy Title Regulatory Analyst Date 6-19-90

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: Utah 0577A
6. If Indian, Allottee or Tribe Name: Ute Tribe
7. If Unit or CA, Agreement Designation: Natural Buttes Unit
8. Well Name and No.: NBU #7
9. API Well No.: 43-047-~~30084~~ 15379
10. Field and Pool, or Exploratory Area: Natural Buttes
11. County or Parish, State: Uintah County, Utah

1. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other
2. Name of Operator: Coastal Oil & Gas Corporation
3. Address and Telephone No: P. O. Box 749 Denver, CO 80201-0749 (303) 573-4476
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 639' FNL & 1049' FEL (NE/NE) Section 23, T9S-R20E

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

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[X] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[ ] Recompletion	[ ] New Construction
[X] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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

The above referenced location has been reclaimed and seeded per BIA specifications and is now ready for final inspection.

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

Signed: Ellen Danni Day Title: Regulatory Analyst Date: 4/8/92

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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

*See Instruction on Reverse Side

WESTPORT OIL AND GAS COMPANY, L.P.

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

February 1, 2002

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

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

Dear Ms. Maxwell:

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

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

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

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

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

Debby J. Black

Debby J. Black
Engineer Technician

Encl:

United States Department of the Interior

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

RECEIVED
FEB 22 2002
DIVISION OF
OIL, GAS AND MINING

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

FEB 21 2002

NOTICE

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

Name Change Recognized

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

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

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

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

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

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

Robert Lopez
Chief, Branch of
Minerals Adjudication

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

UNITED STATES GOVERNMENT

memorandum

Branch of Real Estate Services
Uintah & Ouray Agency

Date: 5 December, 2002

Reply to Attn of: Supervisory Petroleum Engineer

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

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

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

We have no objection.

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

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

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

Charles H Cameron

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

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Washington, D.C. 20240

IN REPLY REFER TO:
Real Estate Services

FEB 1 0 2003

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

Dear Mr. Wilson:

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

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

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

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

Sincerely,

Director, Office of Trust Responsibilities

ACTING

Enclosure

United States Department of the Interior

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

IN REPLY REFER TO
UT-922

February 27, 2003

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

Re: Natural Buttes Unit
Uintah County, Utah

Gentlemen:

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

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

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

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

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks
Chief, Branch of Fluid Minerals

Enclosure

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

UT922:TAThompson:tt:02/27/2003

RECEIVED
FEB 2 8 2003
DIV. OF OIL, GAS & MINING

FORM 9

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

5. LEASE DESIGNATION AND SERIAL NUMBER:

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

7. UNIT or CA AGREEMENT NAME:

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

8. WELL NAME and NUMBER: Exhibit "A"

2. NAME OF OPERATOR: El Paso Production Oil & Gas Company

9. API NUMBER:

3. ADDRESS OF OPERATOR: 9 Greenway Plaza CITY Houston STATE TX ZIP 77064-0995 PHONE NUMBER: (832) 676-5933

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE:

COUNTY:

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

STATE: UTAH

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

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

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

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

BOND # _____

State Surety Bond No. RLB0005236
Fee Bond No. RLB0005238

RECEIVED
FEB 2 8 2003
DIV. OF OIL, GAS & MINING

EL PASO PRODUCTION OIL & GAS COMPANY

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

WESTPORT OIL AND GAS COMPANY, L.P.

NAME (PLEASE PRINT) David R. Dix TITLE Agent and Attorney-in-Fact

SIGNATURE _____ DATE 12/17/02

(This space for State use only)

(5/2000) (See Instructions on Reverse Side)

(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE – Other instructions on reverse side

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

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SEE ATTACHED EXHIBIT "A"

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

9. API Well No.
SEE ATTACHED EXHIBIT "A"

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

3b. Phone No. *(include area code)*
(435) 781-7023

10. Field and Pool, or Exploratory Area

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SEE ATTACHED EXHIBIT "A"

11. County or Parish, State
UINTAH COUNTY, UT

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other SUCCESSOR OF OPERATOR
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

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

RECEIVED

MAR 0 4 2003

DIV. OF OIL, GAS & MINING

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

Name *(Printed/Typed)*
CHERYL CAMERON

Title
OPERATIONS

Signature
Cheryl Cameron

Date
March 4, 2003

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

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

Office

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

(Instructions on reverse)

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. GLH
2. CDW ✓
3. FILE

X Change of Operator (Well Sold) Designation of Agent/Operator

Operator Name Change Merger

The operator of the well(s) listed below has changed, effective: **12-17-02**

FROM: (Old Operator):	**TO:** (New Operator):
EL PASO PRODUCTION OIL & GAS COMPANY	WESTPORT OIL & GAS COMPANY LP
Address: 9 GREENWAY PLAZA	Address: P O BOX 1148
HOUSTON, TX 77064-0995	VERNAL, UT 84078
Phone: 1-(832)-676-5933	Phone: 1-(435)-781-7023
Account No. N1845	Account No. N2115

CA No. **Unit:** **NATURAL BUTTES**

WELL(S)

NAME	SEC TWN RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
ANKERPONT 35-36	35-08S-21E	43-047-31960	2900	FEDERAL	GW	P
NBU 49-12B	12-09S-20E	43-047-30470	2900	FEDERAL	GW	P
NBU 45N	12-09S-20E	43-047-30875	2900	FEDERAL	GW	P
NBU 317-12E	12-09S-20E	43-047-32362	2900	FEDERAL	GW	P
NBU 2-15B	15-09S-20E	43-047-30262	2900	FEDERAL	GW	P
NBU CIGE 22-15-9-20	15-09S-20E	43-047-30497	2900	FEDERAL	GW	P
CIGE 120-15-9-20	15-09S-20E	43-047-32251	2900	FEDERAL	GW	P
CIGE 121-15-9-20	15-09S-20E	43-047-32252	2900	FEDERAL	GW	P
CIGE 265	15-09S-20E	43-047-34781	99999	FEDERAL	GW	APD
NBU 322-15E	15-09S-20E	43-047-33139	2900	FEDERAL	GW	S
NBU CIGE 32A-20-9-20	20-09S-20E	43-047-30496	2900	FEDERAL	GW	PA
NBU 19-21B	21-09S-20E	43-047-30328	2900	FEDERAL	GW	P
NBU 66	21-09S-20E	43-047-31086	99998	FEDERAL	GW	PA
NBU 118	22-09S-20E	43-047-31969	2900	FEDERAL	GW	P
NBU 119	22-09S-20E	43-047-31973	2900	FEDERAL	GW	P
NBU 294	22-09S-20E	43-047-33020	99998	FEDERAL	GW	PA
NBU 294X	22-09S-20E	43-047-33465	2900	FEDERAL	GW	P
NBU 448	22-09S-20E	43-047-34782	99999	FEDERAL	GW	APD
NATURAL BUTTES SWD 4-22	22-09S-20E	43-047-33611	99999	FEDERAL	GW	LA
NBU 7	23-09S-20E	43-047-15379	9244	FEDERAL	GW	PA

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 02/28/2003
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 03/04/2003
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database on:** 03/06/2003
4. Is the new operator registered in the State of Utah: YES Business Number: 1355743-0181
5. If **NO**, the operator was contacted contacted on: _____

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

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM-12/31/2003 BIA-12/5/02

8. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: 02/27/2003

9. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: N/A

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

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 03/07/2003
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 03/07/2003
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

STATE WELL(S) BOND VERIFICATION:

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

FEDERAL WELL(S) BOND VERIFICATION:

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

INDIAN WELL(S) BOND VERIFICATION:

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

FEE WELL(S) BOND VERIFICATION:

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

LEASE INTEREST OWNER NOTIFICATION:

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

COMMENTS:

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. DJJ
2. CDW

X Change of Operator (Well Sold) Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: **1/6/2006**

FROM: (Old Operator):	**TO:** (New Operator):
N2115-Westport Oil & Gas Co., LP	N2995-Kerr-McGee Oil & Gas Onshore, LP
1368 South 1200 East	1368 South 1200 East
Vernal, UT 84078	Vernal, UT 84078
Phone: 1-(435) 781-7024	Phone: 1-(435) 781-7024

CA No. **Unit:** **NATURAL BUTTES UNIT**

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

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 5/10/2006
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 5/10/2006
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 3/7/2006

4a. Is the new operator registered in the State of Utah: YES Business Number: 1355743-0181

4b. If **NO**, the operator was contacted contacted on:

5a. (R649-9-2)Waste Management Plan has been received on: IN PLACE

5b. Inspections of LA PA state/fee well sites complete on: n/a 3 LA wells & all PA wells transferred

5c. Reports current for Production/Disposition & Sundries on: ok

6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 3/27/2006 BIA not yet

7. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: 3/27/2006

8. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

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

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 5/15/2006
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 5/15/2006
3. Bond information entered in RBDMS on: 5/15/2006
4. Fee/State wells attached to bond in RBDMS on: 5/16/2006
5. Injection Projects to new operator in RBDMS on:
6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a Name Change Only

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: CO1203
2. Indian well(s) covered by Bond Number: RLB0005239
3. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number RLB0005236

a. The **FORMER** operator has requested a release of liability from their bond on: n/a rider added KMG
The Division sent response by letter on:

LEASE INTEREST OWNER NOTIFICATION:

4. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 5/16/2006

COMMENTS:

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
MULTIPLE LEASES

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
MUTIPLE WELLS

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7024

10. Field and Pool, or Exploratory Area

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

11. County or Parish, State
UINTAH COUNTY, UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☒ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other CHANGE OF OPERATOR
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

PLEASE BE ADVISED THAT KERR-McGEE OIL & GAS ONSHORE LP, IS CONSIDERED TO BE THE OPERATOR OF THE ATTACHED WELL LOCATIONS. EFFECTIVE JANUARY 6, 2006. KERR-McGEE OIL & GAS ONSHORE LP, IS RESPONSIBLE UNDER TERMS AND CONDITIONS OF THE LEASE(S) FOR THE OPERATIONS CONDUCTED UPON LEASE LANDS. BOND COVERAGE IS PROVIDED BY STATE OF UTAH NATIONWIDE BOND NO. RLB0005237.

RECEIVED
MAY 1 0 2006
DIV. OF OIL, GAS & MINING

BLM BOND = C01203
BIA BOND = RLB0005239

APPROVED 5/16/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

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

Name *(Printed/Typed)*
RANDY BAYNE

Title
DRILLING MANAGER

Signature
Randy Bayne

Date
May 9, 2006

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

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

Office

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

(Instructions on reverse)

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
MULTIPLE LEASES

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
MUTIPLE WELLS

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

9. API Well No.

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7024

10. Field and Pool, or Exploratory Area

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

11. County or Parish, State
UINTAH COUNTY, UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other CHANGE OF OPERATOR
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

EFFECTIVE JANUARY 6, 2006, WESTPORT OIL & GAS COMPANY L.P., HAS RELINQUISHED THE OPERATORSHIP OF THE ATTACHED WELL LOCATIONS TO KERR-McGEE OIL & GAS ONSHORE LP.

APPROVED 5/16/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

RECEIVED
MAY 1 0 2006
DIV. OF OIL, GAS & MINING

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

Name *(Printed/Typed)*	Title
BRAD LANEY	ENGINEERING SPECIALIST
Signature	Date
	May 9, 2006

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Brad Lanny		5-9-06
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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

(Instructions on reverse)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Colorado State Office
2850 Youngfield Street
Lakewood, Colorado 80215-7076

IN REPLY REFER TO:
CO922 (MM)
3106
COC017387 et. al.

March 23, 2006

NOTICE

Kerr-McGee Oil & Gas Onshore L.P.	:	
1999 Broadway, Suite 3700	:	Oil & Gas
Denver, CO 80202	:	

Merger/Name Change - Recognized

On February 28, 2006 this office received acceptable evidence of the following mergers and name conversion:

> Kerr-McGee Oil & Gas Onshore L.P., a Delaware Limited Partnership, and Kerr-McGee Oil & Gas Onshore LLC, a Delaware Limited Partnership merger with and into Westport Oil and Gas Company L.P., a Delaware Limited Partnership, and subsequent Westport Oil & Gas Company L.P. name conversion to Kerr-McGee Oil & Gas Onshore L.P.

For our purposes the merger and name conversion was effective January 4, 2006, the date the Secretary of State of Delaware authenticated the mergers and name conversion.

Kerr-McGee Oil & Gas Onshore L.P. provided a list of oil and gas leases held by the merging parties with the request that the Bureau of Land Management change all their lease records from the named entities to the new entity, Kerr-McGee Oil & Gas Onshore L.P. In response to this request each state is asked to retrieve their own list of leases in the names of these entities from the Bureau of Land Management's (BLM) automated LR2000 data base.

The oil and gas lease files identified on the list provided by Kerr-McGee Oil & Gas Onshore L.P. have been updated as to the merger and name conversion. We have not abstracted the lease files to determine if the entities affected by the acceptance of these documents holds an interest in the lease, nor have we attempt to identify leases where the entity is the operator on the ground that maintains vested record title or operating rights interests. If additional documentation, for change of operator, is required you will be contacted directly by the appropriate Field Office. The Mineral Management Services (MMS) and other applicable BLM offices were notified of the merger with a copy of this notice

Please contact this office if you identify additional leases where the merging party maintains an interest, under our jurisdiction, and we will document the case files with a copy of this notice. If the leases are under the jurisdiction of another State Office that information will be forwarded to them for their action.

Three riders accompanied the merger/name conversion documents which will add Kerr-McGee Oil and Gas Onshore LLC as a principal to the 3 Kerr-McGee bonds maintained by the Wyoming State Office. These riders will be forward to them for their acceptance.

The Nationwide Oil & Gas Continental Casualty Company Bond #158626364 (BLM Bond #CO1203), maintained by the Colorado State Office, will remain in full force and effect until an assumption rider is accepted by the Wyoming State Office that conditions their Nationwide Safeco bond to accept all outstanding liability on the oil and gas leases attached to the Colorado bond.

If you have questions about this action you may call me at 303.239.3768.

/s/Martha L. Maxwell
Martha L. Maxwell
Land Law Examiner
Fluid Minerals Adjudication

Attachment:
List of OG Leases to each of the following offices:
MMS MRM, MS 357B-1
WY, UT, NM/OK/TX, MT/ND, WY State Offices
CO Field Offices
Wyoming State Office
Rider #1 to Bond WY2357
Rider #2 to Bond WY1865
Rider #3 to Bond WY1127

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
http://www.blm.gov

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
3106
(UT-922)

March 27, 2006

Memorandum

To: Vernal Field Office

From: Chief, Branch of Fluid Minerals

Subject: Merger Approval

Attached is an approved copy of the merger recognized by the Bureau of Land Management, Colorado State Office. We have updated our records to reflect the merger from Westport Oil and Gas Company L.P. into Kerr-McGee Onshore Oil and Gas Company. The merger was approved effective January 4, 2006.

Chief, Branch of
Fluid Minerals

Enclosure
Approval letter from BLM COSO (2 pp)

cc: MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225
State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114
Teresa Thompson
Joe Incardine
Connie Seare
Dave Mascarenas
Susan Bauman

RECEIVED
MAR 2 8 2006
DIV OF OIL, GAS & MINING