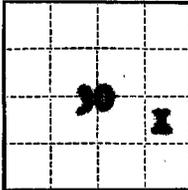


(SUBMIT IN TRIPPLICATE)

Meridian Agency Navajo



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee _____
Lease No. 14-20-603-409

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING 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)

May 11, 1959

Navajo
Well No. B-19 is located 1910 ft. from XXN line and 710 ft. from E line of sec. 30
SE 1/4 Sec. 30 T11S, R24E SLM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
White Mesa San Juan County Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4921 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)

We propose to drill this well with rotary tools to an estimated depth of 3950' to test the Paradox formation. Approximately 300' of 8 5/8" surface casing will be run and cemented and if commercial production is found, a string of 5 1/2" production casing will be run and cemented and the well completed.

The above description of the well location is in relation to section lines established by private survey. Such location with respect to the lease boundaries is shown on the attached plat marked "Exhibit A".

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

Company Continental Oil Company

Address Box 3318

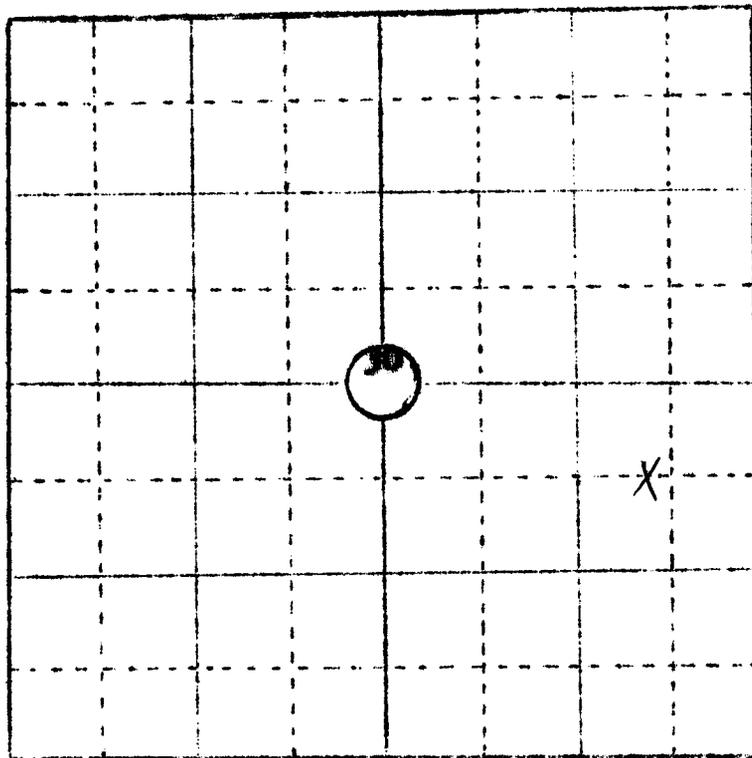
Durango, Colorado

ORIGINAL SIGNED BY:
BURTON HALL

By _____

Title District Superintendent

Company Continental Oil Company
 Lease White Moon Well No. Navajo B-19
 Sec. 30, T 41S, R 24E
 County San Juan State Utah
 Location 718' P&L, 1918' P&L, Sec. 30
 Elevation 4910' CE



Scale - 4 inches equal 1 mile

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.

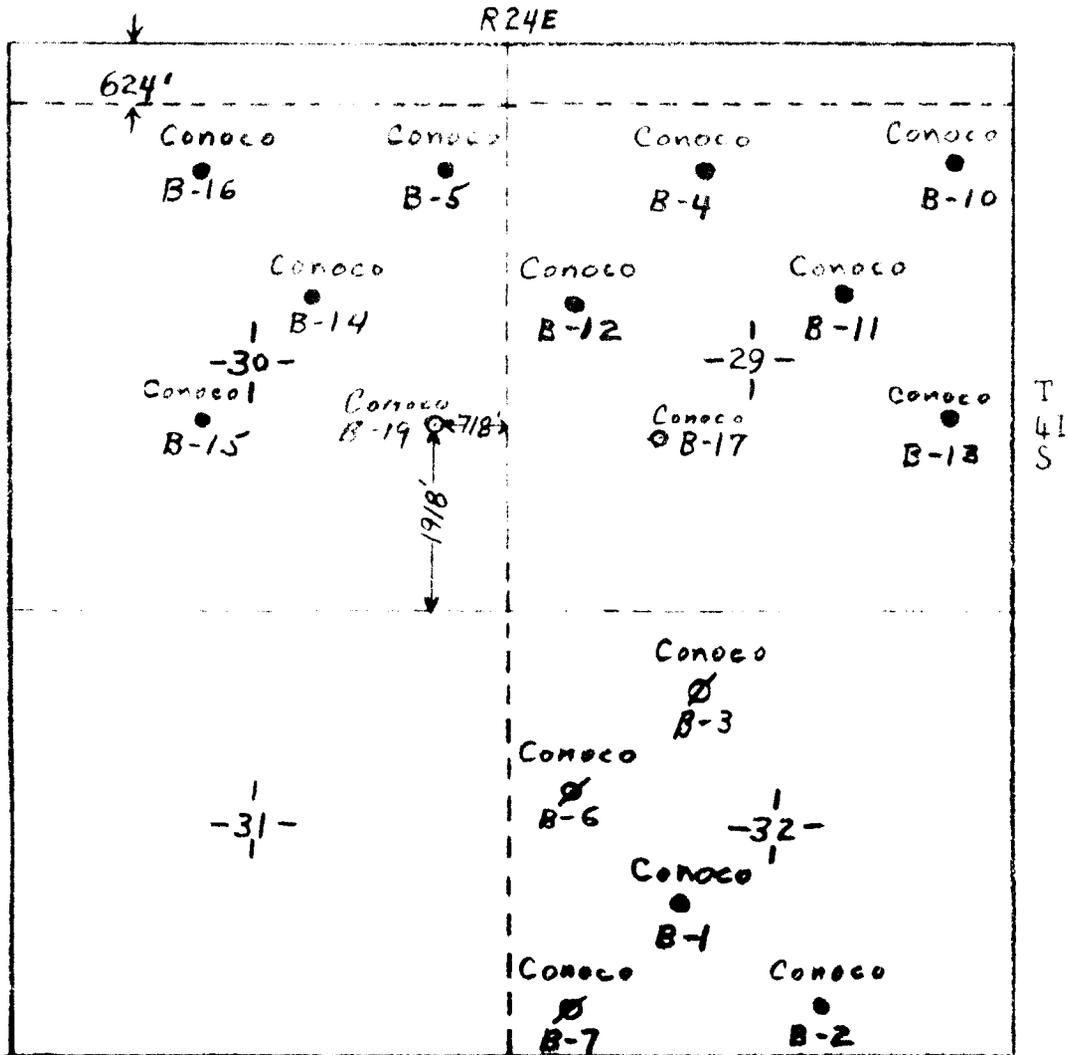
Harold H. Bernal
 Registered Professional Engineer
 and Land Surveyor
 Wyoming License No. 425

Surveyed April 15, 1958

EXHIBIT A

Notice of Intention to Drill for
Well No. Navajo B-19 (Continental)

Indian Lease No. 14-20-603-401



T41S - R24E
San Juan County, Utah

Scale 1" = 2000'

————— Lease Boundary
----- Section Lines

May 18, 1959

Continental Oil Company
P. O. Box 3312
Durango, Colorado

Attention: Burton Hall, District Superintendent

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Navajo B-19, which is to be located 1918 feet from the south line and 718 feet from the east line of Section 30, Township 41 South, Range 24 East, SLM, San Juan County, Utah.

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

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

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
EXECUTIVE SECRETARY

CBF:co

cc: P. T. McGrath, Dist. Eng.
U.S.G.S. Farmington,
New Mexico

FOLD | MA

75 Stratocrete Displacement

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____

Adapters—Material _____ Size _____

SHOOTING RECORD

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

TOOLS USED

Rotary tools were used from 0 feet to 5875' feet, and from _____ feet to _____ feet

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

DATES

January 21, _____, 19 60 Put to producing 1 November _____, 19 59

The production for the first 24 hours was 4 barrels of fluid of which 50% was oil; _____% emulsion; 50% water; and _____% sediment. Gravity, °BA API 41.8 @ 60

If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____ P.S.I. 12-1-59

EMPLOYEES

_____, Driller Contractor & _____, Driller

_____, Driller Arapahoe Drilling Co., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
4748	5502	754	Hermosa
5502	5710	208	Paradox
5710	5875	165	Aneth
FROM—	TO—	TOTAL FEET	FORMATION

FORMATION RECORD (OVER) Continued

16-48094-4

JNC-pm
USGS(3), UTAH O&G(2), RFW, HDH

26

Handwritten notes

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo

	30	
		X

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee _____
Lease No. 14-20-603-407

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 21, 1960

Well No. Navajo B-19 is located 1918 ft. from N line and 718 ft. from E line of sec. 30
SE/4, Sec. 30 T41S, R24E SLBM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
White Mesa San Juan County Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4921 ft.

DETAILS OF WORK

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

Spudded 5-21-59 and drilled with rotary tools to 5875' TD. Ran 5 jts, 13 3/8 inch surface casing, landed at 149' R.B., cemented with 175 sacks regular. Ran 142 jts, 5 1/2" casing at 5875', cemented with 75 sacks regular, 75 sacks stratocrete followed with 200 sacks regular. Perforated with 4 super-dyna jets at 5756'-5763' and 5810'-5828' and with 1 bear gun shot at 5753', 5757', 5809', 5815', 5817', 5824', and 5826'. Treated with 1500 gal. MCA. Swabbed 25 bbls of muddy acid water after 1 hr. treated with 5000 gal. 15% regular and 35,000 gal. H.V. well flowed and died. Pulled packer, landed 2 7/8" tubing at 5824', s.n. at 5792', rig released 6-18-59. Swabbing load oil 6/21, 22, 23 & 24. On 6-25-59 pumped into formation 10,000 gal. of water carrying 5 gal. Halliburton subfractant per 1000 gals. swabbed. Released swab unit 6-29-59 for build-up. Commenced swabbing again on 9-10-59. Swabbed, pulled tubing, set packer at 5709.' Pumped 22,500 gal. of 20% acid into formation flushed with 22,000 gal. water & 1% acid with additive to prevent emulsion.

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

Company Continental Oil Company

Address Box 3312

Durango, Colorado

Original Signed By
H. D. HALEY

By _____

Title District Superintendent

DETAILS OF WORK (CONT)

Swabbed, pulled packer, re-ran tubing and set pump unit. Pump tested well. Prod. stabilized at 2B/O and 2 B/W per day. Well permanently shut-in as non-commercial.

AWL

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo

	30	
		x

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee _____

Lease No. 14-20-603-407

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

September 1, 1960

Well No. Navajo B-19 is located 1918 ft. from N/S line and 718 ft. from E/W line of sec. 30

SE/4 Section 30 T41S R24E S1EM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

White Mesa San Juan County Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4921 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)

SUPPLEMENTAL REPORT TO WELL HISTORY DATED 1-21-60

This notice is to correct our Supplementary Well History dated January 21, 1961, which reported our Navajo B-19 well as permanently shut-in. The correct status of this well is temporarily shut-in pending further study.

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

Company Continental Oil Company

Address Box 3312

Durango, Colorado

By _____

Title District Superintendent

WAB-pm
USGS-Farmington(2) UTAH CAGCC(2) CHG HDR

Original signed by
M. D. [unclear]

gt

W

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo

	30	
		X

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee _____

Lease No. 14-20-603-407

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	
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NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY - <u>Supplement</u>	X
NOTICE OF INTENTION TO ABANDON WELL		

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

September 1, 1960

Navajo
Well No. B-19 is located 1918 ft. from N/S line and 718 ft. from E/W line of sec. 30
SE/4 Section 30 T41S R24E SLBM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
White Mesa San Juan County Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4921 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)

SUPPLEMENTAL REPORT TO WELL HISTORY DATED 1-21-60

This notice is to correct our Supplementary Well History dated January 21, 1961, which reported our Navajo B-19 well as permanently shut-in. The correct status of this well is temporarily shut-in pending further study.

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

Company Continental Oil Company

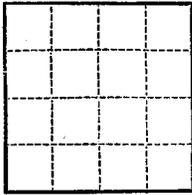
Address Box 3312

Durango, Colorado

By R. D. Italy

Title District Superintendent

(SUBMIT IN TRIPLICATE)



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Allottee Tribal
Lease No. 14-20-603-407

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL	SUBSEQUENT REPORT OF REDRILLING 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	Subsequent Report to Convert to Water Injection Well	X

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

Cortez, Colorado July 16 19⁶³
Fatherford Unit (Formerly Continental Navajo B-19 and Fatherford Unit 30-43)

Well No. 30-43 is located 1918 ft. from N line and 718 ft. from W line of sec. 30

SE/4 Section 30 T11S R24E S12M
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
White Mesa San Juan County Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 4921 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)

Converted to Water Injection 6/10/63.

Ran 2-1/2" tubing and Marlex plastic liner, set at 5710.15' BKB, laid water injection line, hooked up and started water injection 11:00 AM 6/10/63. Well number changed from 30-43 to 30-43 due to conversion to Water Injection.

Previous Production - Greater Aneth - Paradox, Desert Creek zone - Shut down since 12/1/59.

Present: Injecting 2 BPM at 1400'.

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

Company PHILLIPS PETROLEUM COMPANY

Address P. O. Drawer 1150

Cortez, Colorado

By C. H. Boles
C. H. Boles
Title District Superintendent



PHILLIPS PETROLEUM COMPANY

P. O. Drawer 1150
Cortez, Colorado

July 22, 1963

Utah Oil & Gas Conservation Commission
310 Newhouse Building
Salt Lake City 11, Utah

Attention: Mr. Cleon B. Feight

Dear Sirs:

In accordance with Rule E-4 of the Utah General Rules and Regulations, we wish to advise that our Ratherford Unit No. 30W43, located in SE/4 Section 30-T41S-R24E, San Juan County, Utah, was temporarily shut down as a water injection well July 11, 1963 due to its inability to take any water from the Unit's low pressure injection system.

It is our intention for this well to remain in its present status until such time as high pressure is required for injection to other wells on this part of the system.

This office will advise immediately at such time as water injection is resumed to this well.

Yours very truly,

PHILLIPS PETROLEUM COMPANY

A handwritten signature in cursive script that reads "C. M. Boles".

C. M. Boles
District Superintendent

HGC/bh



PHILLIPS PETROLEUM COMPANY
P. O. Drawer 1150
Cortez, Colorado

August 16, 1963

Utah Oil & Gas Conservation Commission
310 Newhouse Building
Salt Lake City 11, Utah

Attention: Mr. Cleon B. Feight

Dear Sirs:

In accordance with Rule E-4 of the Utah General Rules and Regulations, we wish to advise that the following well located on the Ratherford Unit in San Juan County, Utah, was converted to Water Injection.

<u>Old Well No.</u>	<u>New Well No.</u>	<u>Date Converted</u>	<u>Present Status</u>
30-43	30W43	6-10-63	Temporarily Shut Down July 11, 1963

It is our intention for this well to remain in its present status until such time as high pressure is required for injection to other wells on this part of the system.

This office will advise immediately at such time as water injection is resumed.

Sincerely yours,

PHILLIPS PETROLEUM COMPANY


C. M. Bales
District Superintendent

HGC/wh

8881 1 3 00A

STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING
ROOM 4241 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84114
(801) 533-5771
(RULE 1-5 & RULE 1-4)

FORM NO. DOGM-UIC-1
(Revised 1982)

IN THE MATTER OF THE APPLICATION OF
PHILLIPS PETROLEUM COMPANY
ADDRESS P.O. BOX 2920
CASPER, WYOMING ZIP 82602
INDIVIDUAL PARTNERSHIP X CORPORATION
FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR
INJECT FLUID INTO THE 30W43 WELL
SEC. 30 TWP. 41S RANGE 24E
SAN JUAN COUNTY, UTAH

CAUSE NO. C-3(B)

ENHANCED RECOVERY INJ. WELL	<input checked="" type="checkbox"/>
DISPOSAL WELL	<input type="checkbox"/>
LP GAS STORAGE	<input type="checkbox"/>
EXISTING WELL (RULE 1-4)	<input checked="" type="checkbox"/>

APPLICATION

Comes now the applicant and shows the Corporation Commission the following:

1. That Rule 1-5 (g) (iv) authorizes administrative approval of enhanced recovery injections, disposal or LP Gas storage operations.
2. That the applicant submits the following information.

Lease Name Ratherford Unit	Well No. 30W43	Field Greater Aneth	County San Juan
Location of Enhanced Recovery Injection or Disposal Well <u>30W43</u> Sec. <u>30</u> Twp. <u>41S</u> Rge. <u>24E</u>			
New Well To Be Drilled Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Old Well To Be Converted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Casing Test Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date <u>5-83</u>	
Depth-Base Lowest Known Fresh Water Within 1/2 Mile <u>Wingate 1550'</u>	Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		State What Oil & Gas
Location of Injection Source(s) Desert Creek Paradox I & II San Juan River	Geologic Name(s) and Depth of Source(s) Desert Creek (5567') San Juan River (Surface)		
Geologic Name of Injection Zone Desert Creek I	Depth of Injection Interval <u>5756</u> to <u>5828</u>		
a. Top of the Perforated Interval: <u>5756</u>	b. Base of Fresh Water: <u>1550'</u>	c. Intervening Thickness (a minus b) 4206	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> See Attachment #4			
Lithology of Intervening Zones See Attachment #1			
Injection Rates and Pressures SD 2-24-77 Maximum _____ B/D PSI			
The Names and Addresses of Those to Whom Notice of Application Should be Sent. Navajo Tribe, Minerals Dept., P.O. Box 146, Window Rock, AZ 86515 Superior Oil, P.O. Box 4530, The Woodlands, TX 77380 Texaco Inc., P.O. Box 2100, Denver, CO 80201 Southland Royalty, 1000 Fort Worth Club Tower, Fort Worth, TX 76102			

State of Wyoming)
County of Natrona)

PHILLIPS PETROLEUM COMPANY

Applicant

Before me, the undersigned authority, on this day personally appeared A. E. Stuart known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Suscribed and sworn to before me this 21st day of Sept, 19 83

SEAL

My commission expires

DONALD L. HUDSON - Notary Public
County of Natrona State of Wyoming
Donald L. Hudson
Notary Public in and for Natrona Co., Wyoming
My Commission Expires Nov. 3, 1986
(OVER)

1. Attach qualitative and quantitative analysis of representative sample of water to be injected and a qualitative and quantitative analysis of the injection formation of water.
2. Attach plat showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within one-half mile, together and with the name of the operator(s).
3. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division or appropriate government agencies.)
4. Attach Electric or Radioactivity Log of Subject well (if released).
5. Attach schematic drawing of subsurface facilities including; Size, setting depth, amount of cement used measured or calculated tops of cement surface, intermediate (if any) and production casings; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval.
6. If the application is for a NEW well the original and six (6) copies of the application and three (3) complete sets of attachments shall be mailed to the Division. For EXISTING well applications (Rule I-4) only ONE copy of the application and ONE complete set of attachments are required to be mailed to the Division.
7. The Division is required to send notice of application to the surface owner of the land within one-half mile of the injection well and to each operator of a producing leasehole within one-half mile of the injection well. List all required names and addresses in the appropriate space provided on the front of this form.
8. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county of publication before the application is approved. The notice shall include the name and address of applicant, location of proposed injection or disposal well, injection zone, injection pressure and volume. If no written objection is received within 15 days from date of publication the application may be approved administratively.
9. A well shall not be used for injection or disposal unless completed machine accounting Form DOGM-UIC-3b is filed by January 31st each year.
10. Approval of this application, if granted, is valid only as long as there is no substantial change in the operations set forth in the application. A substantial operation change requires the approval of a new application.
11. If there is less intervening thickness required by Rule I-5 (b) 4, attach sworn evidence and data.
12. For enhanced recovery projects, information required by Rule I-4 which is common to more than one well, need be reported only once on the application.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface	13-3/8	149	175	Surface	displacement
Intermediate none					
Production	5-1/2	5875	350	4812	CALCULATED
Tubing	2-1/2	5710.15	Name - Type - Depth of Tubing Packer Baker Tension Pkt 5710.15		
^{PB} Total Depth	Geologic Name - Inj. Zone		Depth - Top of Inj. Interval	Depth - Base of Inj. Interval	
5842	Desert Creek I		5756	5828	

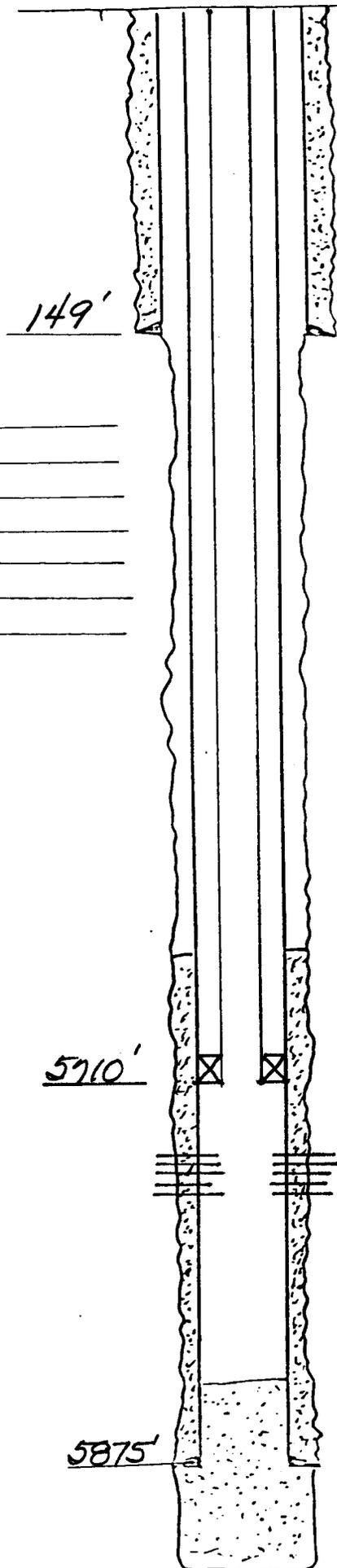
LOCATION: NESE Sec 30-T41S-K24E
FIELD: GREATER ANE
RESERVOIR: Desert Creek I

DATE COMPLETION: 6-10-63
PRESENT STATUS: S.I.

RKB 4921'
GL 4910'

SURFACE CASING: 1 3/8" 48#
H-40

PRODUCTION CASING: 5 1/2" 14#
J-55 5286', 15.5# J-55 623'



PERFORATIONS: _____
5756-63
5810-28

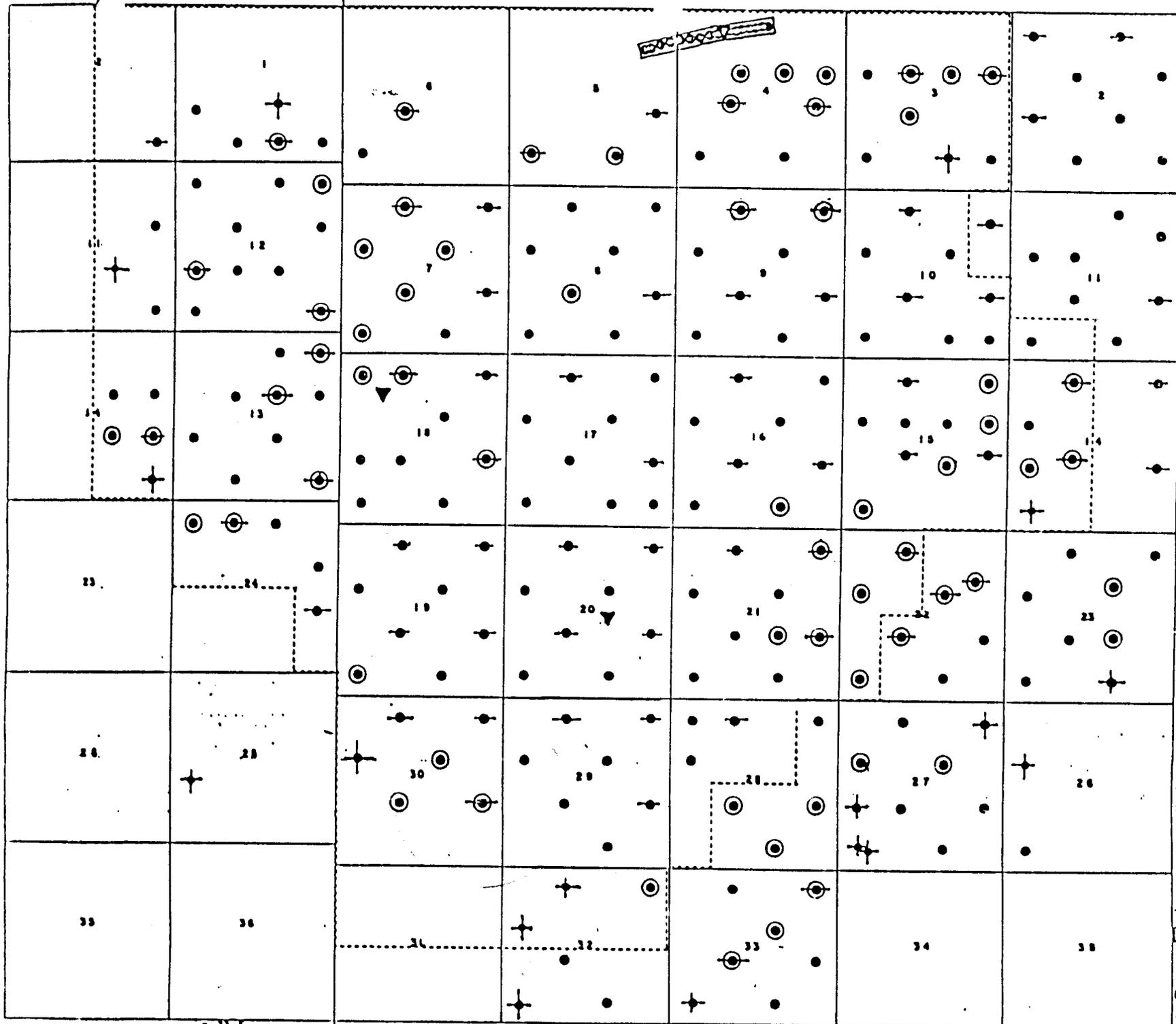
PACKER: Baker Tension
Pkr @ 5710.'
Tubing: 2 1/2" @ 5710'

PBTD: 5842'
OTD: 5950'

Phillips Petroleum Company

R-23-E

R-24-E



RATHERFORD UNIT
 SAN JUAN COUNTY, UTAH
 2" = 1 mile
 RCT 3-83

- oil producer
- ◐ water injector
- ◑ water supply
- ▼ domestic water
- ✚ plugged & abandoned
- shut in well
- unit boundary

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR Phillips Petroleum Company DATE 7-22-83 LAB NO. W30636
 WELL NO. Ratherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM Battery #1 Free water knockout
(7-5-83) @ 10:35
S/N 28568

REMARKS & CONCLUSIONS: _____

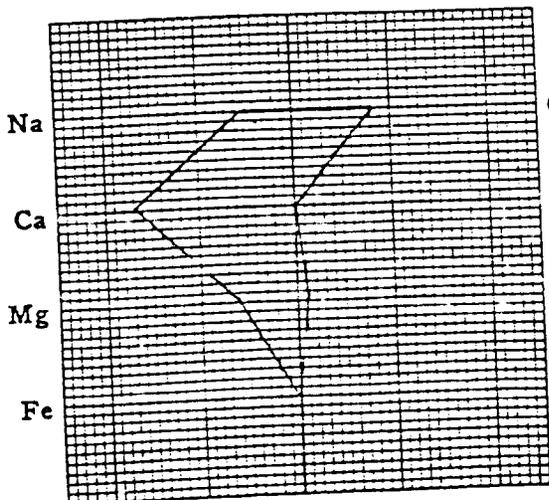
Cations	mg/l	meq/l	Anions	mg/l	meq/l
	Sodium	30147		1311.38	Sulfate
Potassium	429	10.98	Chloride	63000	1776.60
Lithium	--	--	Carbonate	0	0.00
Calcium	6865	342.56	Bicarbonate	151	2.48
Magnesium	1738	124.86	Hydroxide	--	--
Iron	--	--	Hydrogen sulfide	--	--
Total Cations		1807.78	Total Anions		1807.78

Total dissolved solids, mg/l 103633
 NaCl equivalent, mg/l 104549
 Observed pH 7.3

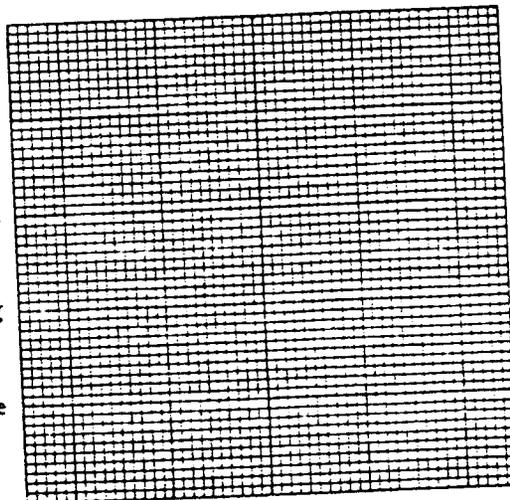
Specific resistance @ 68°F.:
 Observed 0.087 ohm-meters
 Calculated 0.078 ohm-meters

WATER ANALYSIS PATTERN

Sample above described Scale
MEQ per Unit



Cl 200
 HCO₃ 20
 SO₄ 20
 CO₃ 20



Cl
 HCO₃
 SO₄
 CO₃

(Na value in above graphs includes Na, K, and Li)
 NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

WTE INJECTION WELL

CL1-12A (REV. 1964)

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794
Casper, Wyoming

WATER ANALYSIS REPORT

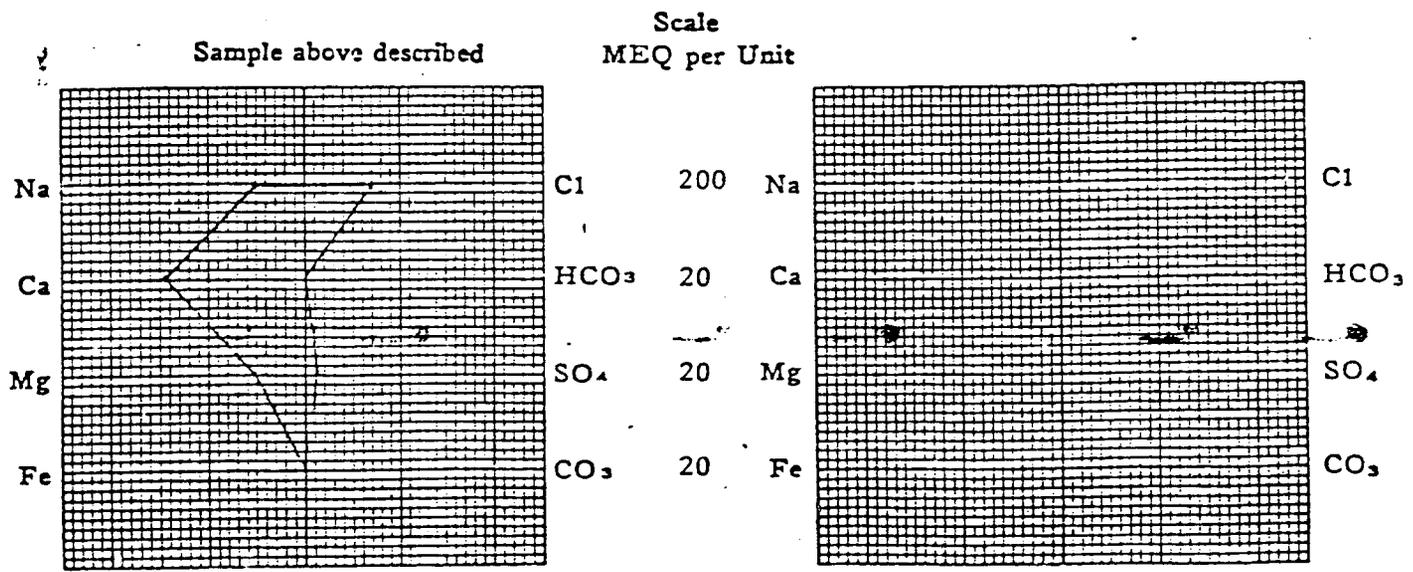
OPERATOR Phillips Petroleum Co. DATE 5-27-83 LAB NO. W30480
 WELL NO. Rutherford Unit LOCATION _____
 FIELD _____ FORMATION _____
 COUNTY San Juan INTERVAL _____
 STATE Utah SAMPLE FROM _____

REMARKS & CONCLUSIONS: Specific gravity @68°F ----- 1.0646
 Oil and grease, mg/l ----- 2.5
 Aluminum (Al), mg/l ----- 0.90
 Iron (Fe), mg/l ----- 0.3
 Total Sulfides, mg/l ----- ND(0.1)

Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	24574	1068.99	Sulfate	1190	24.75
Potassium	396	10.14	Chloride	52000	1466.40
Lithium	-	-	Carbonate	0	0.00
Calcium	5982	298.50	Bicarbonate	190	3.12
Magnesium	1419	116.64	Hydroxide	-	-
Iron	-	-	Hydrogen sulfide	-	-
Total Cations		1494.27	Total Anions		1494.27

Total dissolved solids, mg/l ----- 85655
 NaCl equivalent, mg/l ----- 86344
 Observed pH ----- 7.4
 Specific resistance @ 68°F.:
 Observed ----- 0.095 ohm-meters
 Calculated ----- 0.086 ohm-meters

WATER ANALYSIS PATTERN



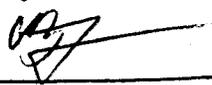
(Na value in above graphs includes Na, K, and Li)
 NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

CHECKLIST FOR INJECTION WELL APPLICATION AND FILE REVIEW

Operator: Phillips Well No. Ratherford Unit 30W43
 County: San Juan T 41S R 24E Sec. 30 API# 43-037-16436
 New Well Conversion Disposal Well Enhanced Recovery Well

	<u>YES</u>	<u>NO</u>
UIC Forms Completed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Plat including Surface Owners, Leaseholders, and wells of available record	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schematic Diagram	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fracture Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pressure and Rate Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Adequate Geologic Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fluid Source	<u>Desert Creek</u>	
Analysis of Injection Fluid	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> TDS <u>85055</u>	
Analysis of Water in Formation to be injected into	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> TDS <u>103633</u>	
Known USDW in area	<u>Urgate</u>	Depth <u>1550</u>
Number of wells in area of review	<u>5</u>	Prd. <u>4</u> P&A <u>0</u>
	Water <u>0</u>	Inj. <u>1</u>
Aquifer Exemption	Yes <input type="checkbox"/> NA <input checked="" type="checkbox"/>	
Mechanical Integrity Test	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
	Date _____	Type _____

Comments: TOC 4812

Reviewed by: 

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

SUBMIT BY TELETYPE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

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. WELL TYPE OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER Injection Well		RECEIVED JUL 11 1985	
2. NAME OF OPERATOR Phillips Oil Company		6. WELL NO. 30W43	
3. ADDRESS OF OPERATOR P.O. Box 2920, Casper, WY 82602		7. WELL ACCOUNT NO. SW-I-4192	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1980' FSL and 718' FEL. Sec. 30-T41S-R24E		8. FIELD OR LEASE NAME Rutherford Unit	
14. PERMIT NO. 43-037-16436		15. ELEVATIONS (Show whether of, to, or, etc.) 4910' DF	
10. FIELD AND POOL, OR WELDCAT Greater Aneth		11. SEC., T., R., OR NE. AND CORNER OR AREA 30-41S-24E SLBM	
12. COUNTY OR PARISH San Juan		13. STATE Utah	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDISE <input type="checkbox"/>	ABANDON* <input checked="" type="checkbox"/>	SHOOTING OR ACIDISING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	
(Other) _____			

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 Attachment for Well Data, Justification, and Proposed Operation.

A 10' x 8' x 6' fenced pit will be constructed on location in a previously disturbed area. Upon completion of the workover, the pit will be dried and recovered.

- 5-SLM, Farmington, NM
- 2-Utah O&G CC, Salt Lake City, Utah
- 1-P. J. Adamson
- 1-B. Conner, 318B-TRW
- 1-J. R. Weichbrodt
- 1-C. M. Anderson
- 1-File RC

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

SIGNED <u>A. E. Shuff</u>	TITLE <u>Area Manager</u>	DATE <u>July 8, 1985</u>
(This space for Federal or State office use)		
APPROVED BY <u>Cleon B. Feight</u>	TITLE <u>VIC Manager</u>	DATE <u>7/15/85</u>

*See Instructions on Reverse Side

Ratherford Unit 30W43

7-8-85 ZS

Item #17:

Well Data:

13-3/8" csg @ 149' w/175 sx cmt
5-1/2" csg @ 5875' w/350 sx cmt
Perfs @ 5753'-5763', 5809'-5828'
Formation Tops: DeChelly @ 2,650'
Hermosa @ 4,165'
Desert Creek @ 5,560'

TD: 5,875'

RECEIVED

JUL 11 1985

DIVISION OF OIL
GAS & MINING

Justification:

Well does not have economical use as an injection well and has no recompletion or stimulation potential.

Proposed Operation:

- 1) Sqz perfs w/85 sx cmt. TOC @ 5,600'.
- 2) Spot 30 sx cmt in 5-1/2" csg from 4,300' to 4,100' across Hermosa Fm.
- 3) Perf 5-1/2" csg @ 2,900'. (50' below DeChelly)
- 4) Pump 125 sx cmt to provide 350' balanced plug in annulus and in 5-1/2" csg from 2,900' to 2,550' to isolate the DeChelly Fm.
- 5) Perf 5-1/2" csg @ 200' (50' below surf csg).
- 6) Pump 150 sx cmt to provide 200' plug in annulus and in 5-1/2" csg from 200' to surface to provide plug across 13-3/8" csg shoe and to provide surface plug.
- 7) Install P&A marker unless surface owner requests otherwise and rehab surface.
- 8) Will use mud-laden fluid between all cmt plugs.


ZGS/fb (17)
Casper-RC

UTAH DIVISION OF OIL, GAS AND MINING
CASING-BRADENHEAD TEST

OPERATOR: Phillips Petroleum Company
 FIELD: Greater Aneth LEASE: Ratherford Unit
 WELL # 30W43 SEC. 30 TOWNSHIP 41S RANGE 24E
 STATE (FED.) FEE DEPTH 5842 TYPE WELL INJW MAX. INJ. PRESS. _____
 SD 2/24/77 Proposed to plug in '85
 TEST DATE 6/17/86

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>	<u>13³/₈</u>	<u>149</u>	<u>175</u>		<u>SI</u>	
<u>INTERMEDIATE</u>	<u>NONE</u>	<u>—</u>	<u>—</u>			
<u>PRODUCTION</u>	<u>5¹/₂</u>	<u>5875</u>	<u>350</u>			

TUBING 2¹/₂ 5710
Baker Tension Per # 5710

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>						
<u>INTERMEDIATE</u>						
<u>PRODUCTION</u>						

TUBING

CASING STRING	SIZE	SET AT	CMT	PRESSURE READINGS	REMARKS	FUTURE
<u>SURFACE</u>						
<u>INTERMEDIATE</u>						
<u>PRODUCTION</u>						

TUBING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on re-
verse side)

Expires August 31, 1985

3
1. LEASE DESIGNATION AND SERIAL NO.

14-20-603-407

2. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

3. UNIT AGREEMENT NAME

SW-I-4192

4. FARM OR LEASE NAME

Ratherford Unit

5. WELL NO.

30W43

6. FIELD AND POOL, OR WILDCAT

Greater Aneth

7. SEC., T., R., N., OR S.E.K. AND SURVEY OR AREA

Sec. 30-41S-24E SLBM

8. COUNTY OR PARISH

San Juan

9. STATE

Utah

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 OTHER Injection Well

2. NAME OF OPERATOR
Phillips Petroleum Company

3. ADDRESS OF OPERATOR
P.O. Box 2920, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
1980' FSL and 718' FEL
Sec. 30-T41S-R24E

14. PERMIT NO.
43-037-16436

15. ELEVATIONS (Show whether BV, ST, OR, etc.)
4910' DF

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(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.)*

Due to current economic conditions, approval is requested to keep well shut in until conditions improve.

RECEIVED
OCT 16 1986

DIVISION OF
OIL, GAS & MINING

- 5-BLM, Farmington, NM
- 2-Utah O&G CC, Salt Lake City, Utah
- 1-P. J. Adamson
- 1-M. Williamson, 302 TRW
- 1-J. R. Reno
- 1-B. J. Murphy
- 1-File-RC

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

SIGNED D. C. Gill

TITLE Area Manager

DATE 10-13-86

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

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

DATE: 10-17-86

BY: John R. Bays

Federal approval of this action
is required before commencing
operations.

*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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPL. (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS OF WELLS
(Do not use this form for proposals to drill or to deepen or plug wells in a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-407	
2. NAME OF OPERATOR Phillips Petroleum Company		6. IF INDIAN, ALLIANCE OR TRIBE NAME Navajo	
3. ADDRESS OF OPERATOR P. O. Box 2920, Casper, WY 82602		7. UNIT AGREEMENT NAME SW-I-4192	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1980' FSL & 718' FEL Sec. 30-T41S-R24E		8. FARM OR LEASE NAME Ratherford Unit	
14. PERMIT NO. 43-037-16436		9. WELL NO. 30W43	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4910' DF		10. FIELD AND POOL, OR WILDCAT Greater Aneth	
		11. SEC., T., R., N., OR BLK. AND SURVEY OR AREA 30-41S-24E SLBM	
		12. COUNTY OR PARISH San Juan	13. STATE Utah

OCT 28 1987

50W 9

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(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.)*

Well was plugged October 15, 1987. See attachment for well data and summary of completed operations.

- 5-BLM, Farmington, NM
- 2-Utah O&G CC, Salt Lake City, Utah
- 1-P. J. Konkel
- 1-J. R. Reno
- 1-File - RC
- 1-M. Williamson, 1370 G POB, Bartlesville

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

SIGNED D. C. Gill TITLE Area Manager DATE October 23, 1987

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY: _____

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

DATE: 10-28-87

BY: [Signature]

*See Instructions on Reverse Side

Ratherford Unit 30W43
Item 17

RECEIVED
OCT 28 1987

Well Data:

DIVISION OF
OIL, GAS & MINING

RKB: 4935' GL: 4925' PBD: 5832'

13-3/8", 48# casing @ 153' w/ cement returns to surface
5-1/2", 14# casing @ 5875' w/ est. top of cement @ 3526'
No casing was recovered.

Perfs @ 5756'-5763', 5810'-5828'

Formation tops: Chinle @ 1503'
 Hermosa @ 4550'
 Desert Creek @ 5710'

Completed Operations:

1. Release packer in hole, COOH w/ 2-7/8" tubing, 2" marlex liner, and half of packer. Packer had come apart.
2. RIH w/ bit & scraper. Hit remaining part of packer at 2792'.
3. POOH. RIH w/ spear & jars. Tagged fish, could not latch on, bumped downward twice, loosened packer part, and pushed to bottom of hole, 5830'. Left fish at bottom of hole.
4. POOH. RIH w/ bit & scraper, tag bottom at 5823'. Pressured down annulus to establish rate, 1 BPM @ 1500 psi, lost only 500 psi in 15 min.
5. POOH, lay down bit & scraper. RIH open-ended to 5820'.
6. Spotted 25 sx cement balanced plug from 5820' to 5639' in 5-1/2" casing across perfs. Tagged plug at 5639'.
7. Spotted 33 sx cement balanced plug from 4373' to 4696' to isolate Hermosa formation. Tagged plug at 4373'.
8. RIH w/ perforating gun to 1553', shot 5 holes/ft, 2 feet.
9. RIH and set Mt. States cement retainer at 1396'.
10. Pumped 40 sx cement, 35 sx cement below retainer in casing and up annulus to set plug from 1396' to 1553', with remaining 5 sx on top of retainer.
11. RIH w/ perforating gun to 200', shot 5 holes/ft, 2 feet.
12. Circulated 200' cement plug (135 sx cement) down 5-1/2" casing up 5-1/2" - 13-3/8" annulus (from 200' to surface).
13. Cut 5-1/2 and 13-3/8" casings off 3' below GL. Welded 3/8" plate on 13-3/8" casing and installed inscribed permanent monument. Filled pit, removed anchors, and clean up location.

DOWNHOLE SCHEMATIC

RECEIVED
OCT 28 1987

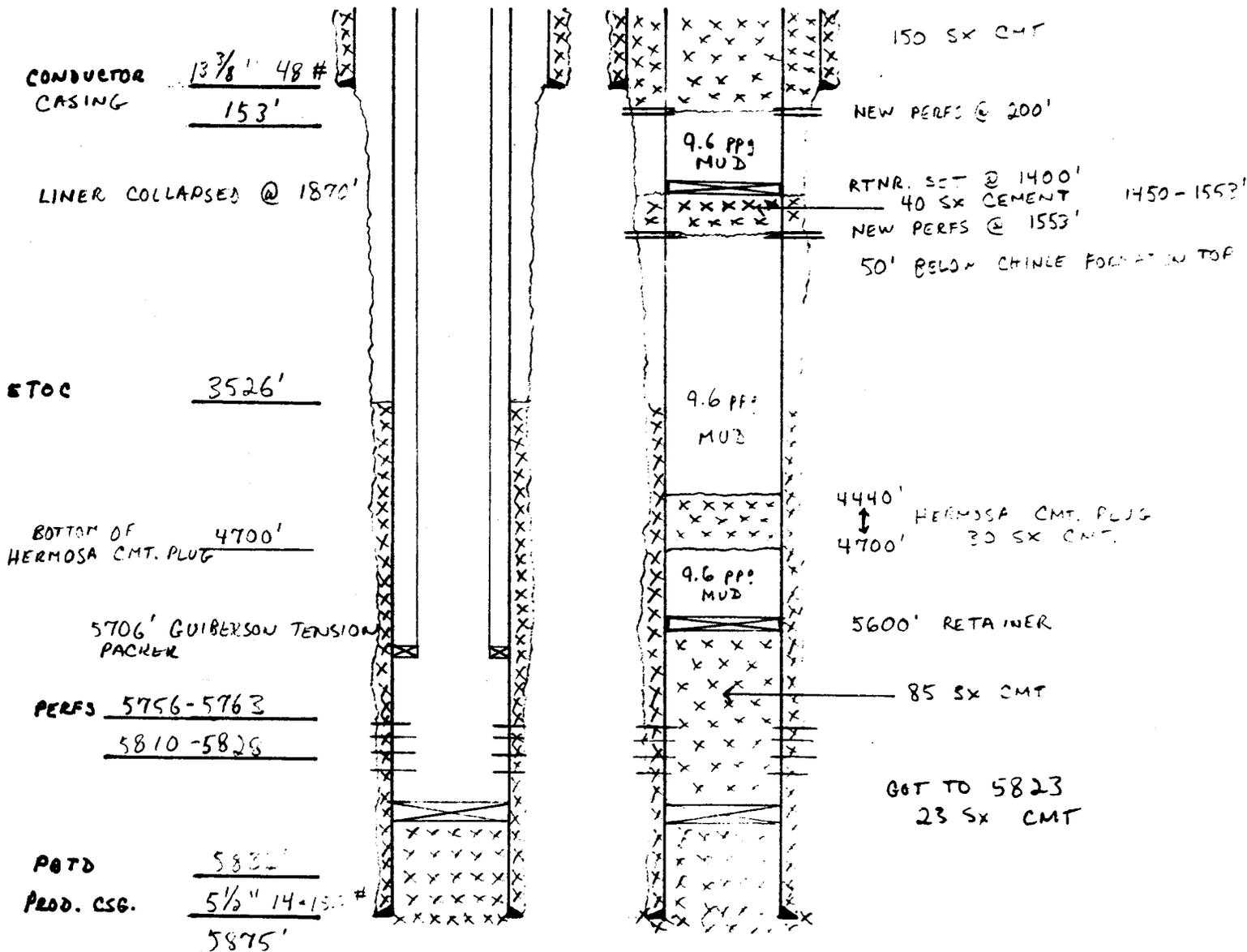
WELL: 30 W 43
RKB ELEV: 4935
GL ELEV: 4925

LOCATION:

DIVISION OF
OIL, GAS & MINING

CURRENT

PROPOSED



STOC 3526'

BOTTOM OF HERMOSA CMT. PLUG 4700'

5706' GUIBERSON TENSION PACKER

PERFS 5756-5763
5810-5823

PBD 5832'
PROD. CSB. 5 1/2" 14-15.5#
5875'

TUBING: 2 7/8" 6.5 #
2" MARLEX LINER
5 1/2" CSB CMTB w/ 350 SX
623' OF 15.5# CSB

150 SX CMT
NEW PERFS @ 200'
RTNR. SET @ 1400'
40 SX CEMENT 1450-1553'
NEW PERFS @ 1553'
50' BELOW CHIME FORMATION TOP

4440'
↑
4700' HERMOSA CMT. PLUG
30 SX CMT.

5600' RETAINER

85 SX CMT

GOT TO 5823
23 SX CMT

DOWNHOLE SCHEMATIC

RECEIVED
OCT 28 1987

DIVISION OF
OIL, GAS & MINING

WELL: 30 W 43

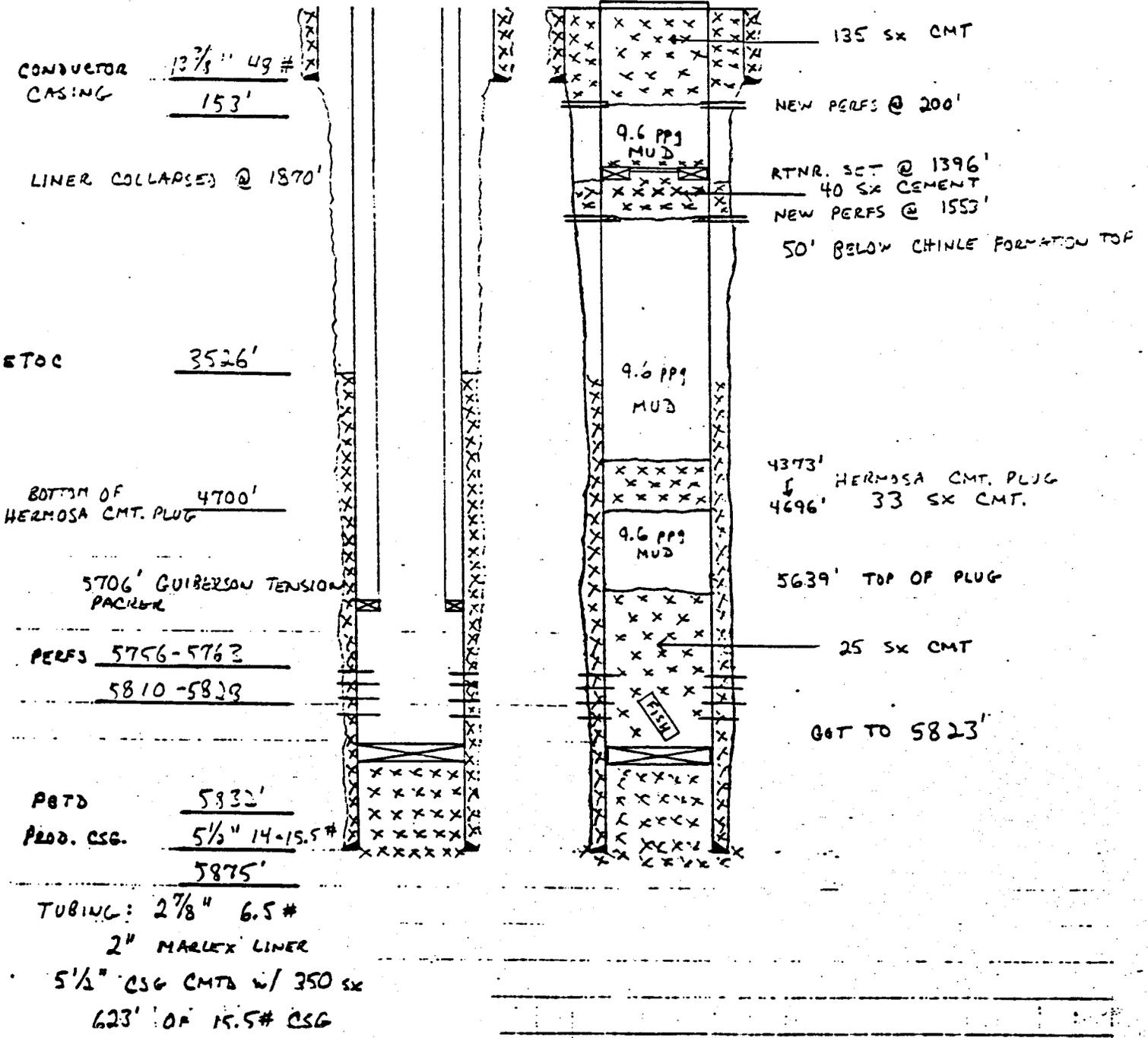
LOCATION:

RTNS ELEV: 4935

GL ELEV: 4925

CURRENT

COMPLETED



CONDUCTOR CASING 12 3/8" 49 #
153'

LINER COLLAPSED @ 1870'

STOC 3526'

BOTTOM OF HERMOSA CMT. PLUG 4700'

5706' GUIBERSON TENSION PACKER

PERFS 5756-5762
5810-5823

PBD 5832'

PROD. CSG. 5 1/2" 14-15.5 #
5875'

TUBING: 2 7/8" 6.5 #
2" MARLEX LINER

5 1/2" CSG CMTS w/ 350 SX
623' OF 15.5# CSG

135 SX CMT

NEW PERFS @ 200'

RTNR. SCT @ 1396'
40 SX CEMENT
NEW PERFS @ 1553'

50' BELOW CHISLE FORMATION TOP

9.6 ppg
MUD

4373' HERMOSA CMT. PLUG
4696' 33 SX CMT.

5639' TOP OF PLUG

25 SX CMT

GET TO 5823'