

Verbal approval given by Dean G.B. Wright

8-15-62.

**FILE NOTATIONS**Entered in NTD File ✓

Entered On SR Sheet \_\_\_\_\_

Location Map Pinned 7 ✓Card Indexed ✓

IWR for State or Fee Land \_\_\_\_\_

Checked by Chief PLMB

Copy NID to Field Office \_\_\_\_\_

Approval Letter In accordance with Cause #54 ✓

Disapproval Letter \_\_\_\_\_

**COMPLETION DATA:**Date Work Completed: 10-9-62

OW \_\_\_\_\_

VWV \_\_\_\_\_

TA ✓

GW \_\_\_\_\_

QSS \_\_\_\_\_

PA \_\_\_\_\_

Location Inspected \_\_\_\_\_

Bond released \_\_\_\_\_

State of Fee Land: \_\_\_\_\_

**LOGS FILED**D: 200g 10-29-62

E: \_\_\_\_\_

Logs No. 1E: ✓

GR: \_\_\_\_\_

GRN: \_\_\_\_\_

Micro: \_\_\_\_\_

E: \_\_\_\_\_

Mph: \_\_\_\_\_

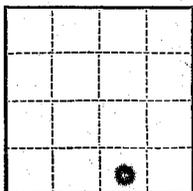
Sonic: \_\_\_\_\_

Others: Produce Twigg

*Copy N. L. C.*

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Allottee \_\_\_\_\_

Lease No. I-149-IND-9123

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)

August 16, 1962

Navajo Tribe "K"

Well No. 13 is located 660 ft. from SW line and 1980 ft. from E line of sec. 13

*C SW*

SE 1/4 of Sec. 13      40-S      25-E      SLM  
(1/4 Sec. and Sec. No.)      (Twp.)      (Range)      (Meridian)

East Ismay      San Juan      Utah  
(Field)      (County or Subdivision)      (State or Territory)

The elevation of the derrick floor above sea level is 5065 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)

FORMATION TOPS AS EXPECTED

Chinle . . . . .	1640'
Organ Rock . . . . .	2385'
Herosa . . . . .	4630'
Ismay . . . . .	5575'
Total Depth . . . . .	5720'

CASING PROGRAM (APPROX.)

Size Casing	Wt.	Set At	Cement
7-5/8"	15.28#	250'	150 ax.
4-1/2"	9.5#	5720'	*

\*4-1/2" casing will be cemented in two stages with DV Tool set at 1740'. Primary stage - 200 sacks four percent gel tailed in with 50 sacks latex. Second stage - 300 sacks 50-50 pozmix four percent gel.

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

Company TEXACO Inc.

Address P. O. Box 810

Farrington, New Mexico

By *[Signature]*

Title District Superintendent

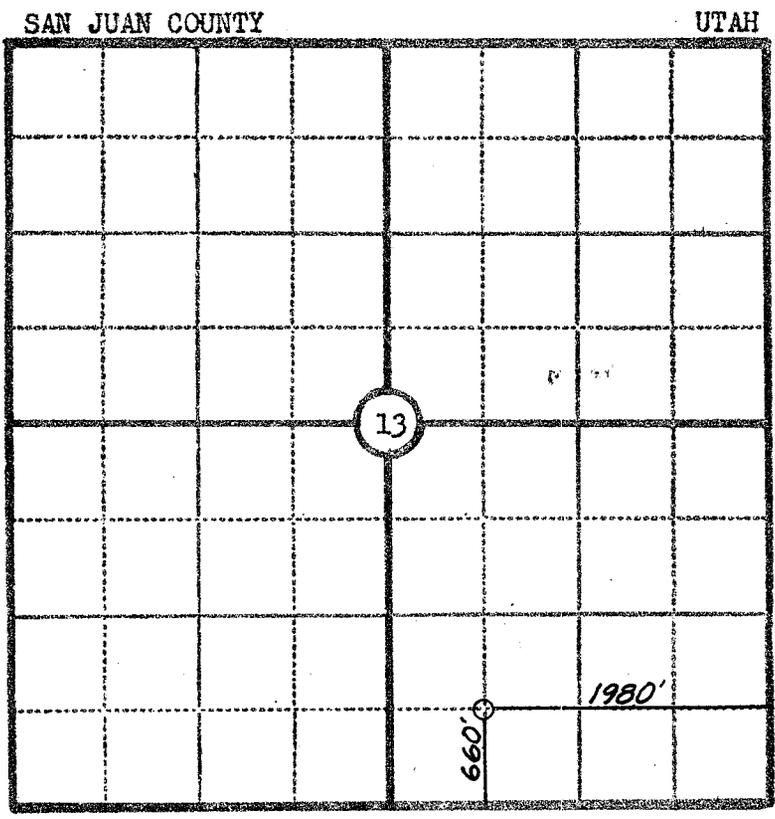
Company TEXACO INC.

Lease NAVAJO TRIBE "K" Well No. 13

Sec. 13, T. 40 SOUTH, R. 25 EAST, S.L.M.

Location 660' FROM THE SOUTH LINE AND 1980' FROM THE EAST LINE

Elevation 5056 UNGRADED



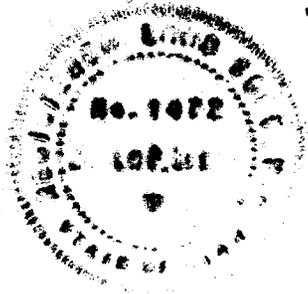
Scale—4 inches equal 1 mile

This is to certify that the above plat was prepared from field note 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.

*James P. Leese*  
Registered Land Surveyor.

James P. Leese  
Utah Reg. No. 1472

Seal: \_\_\_\_\_  
Surveyed 15 August, 19 62



August 17, 1962

Texaco, Inc.  
P. O. Box 810  
Farmington, New Mexico

Attention: C. P. Farmer, Dist. Supt.

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. Navajo Tribe "K" #13, which is to be located 660 feet from the south line and 1980 feet from the east line of Section 13, Township 40 South, Range 25 East, SLBM, San Juan County, Utah.

Please be advised that insofar as this office is concerned approval to drill said well is hereby granted in accordance with the Order issued in Cause #54 on May 9, 1961.

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

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT  
EXECUTIVE DIRECTOR

CBF:cp

cc: P. T. McGrath, Dist. Eng.  
U. S. Geological Survey

H. L. Coonts, Pet. Eng.  
OGCC - Moab, Utah

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

ALLOTTEE  
TRIBE Navajo Tribe "K"  
LEASE NO. X-149-IND-9123

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County San Juan Field Ismay

The following is a correct report of operations and production (including drilling and producing wells) for the month of September, 1962, TEXACO

Agent's address P. O. Box 810 Company TEXACO Inc.

Farmington, New Mexico Signed R. W. Lyon

Phone DA 5-1941 Agent's title Unit Superintendent

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DATE 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)
SW NE 1840S	26E	2	30	30	3,881	42	2,632		395	Flowing
NE NW 18	"	"	3	30	853	42	845		2,812	Pumping
SW NW 18	"	"	4	30	209	42	955		188	Pumping
NE SE 18	"	"	5	30	1,339	42	1,689		70	Flowing
NE NE 18	"	"	6	26	400	42	1,316		73	Pumping
SE SE 18	"	"	7	30	3,667	42	4,437		1,061	Flowing
NE SW 18	"	"	8	30	6,943	42	7,634		1,646	Flowing
NE SW 19	"	"	9	30	2,292	42	1,944		1,360	Pumping
SE SE 18	"	"	10	30	3,040	42	6,169		2,218	Flowing
NE NE 24	"	25E	11	13	2,993	42	3,009		1,102	Flowing
SW SE 13	"	"	13	-	-	-	-		-	Drig. to TD of 5738'
					<u>25,617</u>		<u>30,630</u>			
										Used on lease 2,414 MCF
										Drilling fuel for Well "K" # 13 1,819 MCF
										Used on Navajo Tribe "H" Lease 359 MCF
										Sold to El Paso Natural Gas Co. 26,038 MCF
										<u>TOTAL 30,630 MCF</u>

\*Oil from this lease is produced into common tank battery located on Navajo "J" lease. There were 26,038 runs or sales of oil, 26,038 M. cu. ft. of oil.

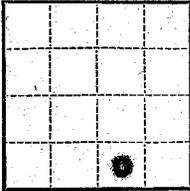
NOTE: Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.



*Copy to file*

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Allotee \_\_\_\_\_

Lease No. X-149-IND-9123

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	<input checked="" type="checkbox"/>
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	<input checked="" type="checkbox"/>
NOTICE OF INTENTION TO ABANDON WELL		

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

October 22, 1962

Navajo Tribe "K"  
Well No. 13 is located 660 ft. from SK line and 1980 ft. from E line of sec. 13  
3E 1/4 of Sec. 13 40-S 25-E SLM  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Ismay San Juan Utah  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 5067 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 5738'. Plugged back depth 5712'.

After cementing 4 1/2" casing and drilling out cement to total depth, swabbed open hole from 5722' to 5738' natural. After 9 hours of swabbing, well swabbed 100% salt water. Set retainer at 5712' (P.B.T.D.) and squeezed open hole with 50 sacks of regular cement. Maximum squeeze pressure 4000 PSI. Reversed out 30 sacks of cement. Perforated 4 1/2" casing from 5666' to 5680', 5692' to 5695' and 5698' to 5702' with 2 jets per foot. Set packer at 5656' and treated all perforations with 3000 gallons of retarded acid with low fluid loss additive added. Treating pressure 4500 to 3700 PSI with an injection rate of 1.5 barrels per minute. Five minute shut in pressure 1000 PSI. After recovering load oil and acid residue, swabbed 100% salt water. (OVER)

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

Company TEXACO Inc.

Address P. O. Box 810

Farmington, New Mexico

By [Signature]

Title District Superintendent

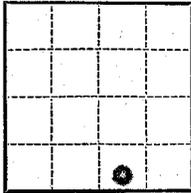
Set RTTS packer at 5630' and squeezed perforations with 75 sacks of low water loss cement. Maximum squeeze pressure 3500#. Reversed out 5 sacks of cement and washed to top of retainer at 5712'. Perforated 4½" casing from 5666' to 5680' with 2 jets per foot. Set packer at 5649' and commenced swabbing. After recovering load water, swabbed 13 barrels of salt water and swabbed well dry. Acidized perforations with 3000 gallons of FLAX No. 2 acid. Treating pressure 4000 to 2800 PSI with an injection rate of ½ barrel per minute. Ten minute shut in pressure 3200 PSI. After recovering load oil and acid residue, well swabbed at the rate 1½ barrels per hour, 75% salt water and 25% oil. Pulled tubing with packer and flanged up well head. Well was temporarily abandoned 10-9-62, and is now being held as a possible future water injection well.

Verbal approval to temporarily abandon this well was received from Mr. P. T. McGrath on October 9, 1962.

OCT 29 1962

*Copy H.L.C.*  
**(SUBMIT IN TRIPLICATE)**

Indian Agency Navajo



**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

Allottee \_\_\_\_\_

Lease No. **I-149-IND-9123**

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL _____	SUBSEQUENT REPORT OF WATER SHUT-OFF _____	<b>X</b>
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)

**October 22**, 19 **62**

**Navajo Tribe "K"**  
Well No. **13** is located **660** ft. from **XX** line and **1980** ft. from **E** line of sec. **13**  
**SE 1/4 of Sec. 13** **40-S** **25-E** **SLM**  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
**Ismy** **San Juan** **Utah**  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is **5065** 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)

Drilled 6-3/4" hole to 5738' and cemented 5712' of 4 1/2" casing at 5722' in two stages. Cemented first stage through float collar with 250 sacks of regular cement with latex added to last 50 sacks. Cemented second stage through D. V. tool set at 1729' with 300 sacks of 50-50 pozmix. Cement circulated from D.V. tool to surface. Drilled out D.V. tool and cement to total depth. After drilling out D.V. tool, tested casing with 1000 PSI for 30 minutes. Casing tested o.k.

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

Company **TEXACO Inc.**

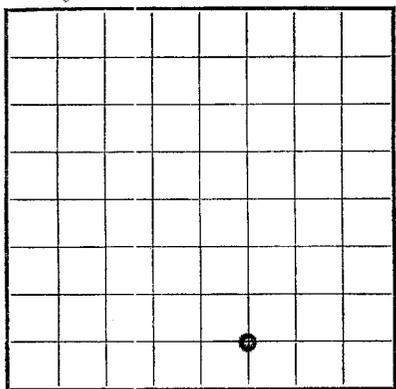
Address **Box 810**

**Farmington, N.M.**

By *[Signature]*

Title **District Superintendent**

U. S. LAND OFFICE **Navajo**  
**Y-149-IND-9123**  
 SERIAL NUMBER \_\_\_\_\_  
 LEASE OR PERMIT TO PROSPECT \_\_\_\_\_



LOCATE WELL CORRECTLY

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company **Texaco Inc.** Address **Box 810, Farmington, N. M.**  
 Lessor or Tract **Navajo Tribe "K"** Field **Ismay** State **Utah**  
 Well No. **13** Sec. **13** **40-S** R. **25-E** Meridian **SLM** County **San Juan**  
 Location **660** ft. <sup>(N.)</sup> of **S** Line and **1980** ft. <sup>(W.)</sup> of **E** Line of **Section 13** Elevation **5067**  
(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 \_\_\_\_\_  
*C. P. Gamm*

Date **October 25, 1962** Title **District Superintendent**

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

Commenced drilling **August 20**, 19**62** Finished drilling **September 18**, 19**62**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **5666** to **5680** No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
 No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
 No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

IMPORTANT WATER SANDS

No. 1, from **none** to \_\_\_\_\_ No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
 No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
7-5/8	15.23	slip-joint weld	Spiral	254'	Baker	None			
4-1/2	9.5	8R	J-55	5712'	Baker	None			

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7-5/8	264'	200	Halliburton		
4-1/2	5722'	550	Halliburton		
(4 1/2" casing cemented in two stages with DV Tool set at 1729'. Cemented through float collar with 250 sacks and through DV Tool with 300 sacks.)					

PLUGS AND ADAPTERS

Heaving plug—Material **None** Length **--** Depth set **--**  
 Adapters—Material **None** Size **--**

SHOOTING RECORD

FOLD MARK

**SHOOTING RECORD**

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
None						

**TOOLS USED**

Rotary tools were used from 0 feet to 5738 feet, and from      feet to      feet  
 Cable tools were used from none feet to      feet, and from      feet to      feet

**DATES**

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

**EMPLOYEES**

B. D. Ruskin, Driller V. J. Roberts, Driller  
M. E. Miller, Driller     , Driller

**FORMATION RECORD**

FROM-	TO-	TOTAL FEET	FORMATION
0	93	93	Sand & surface rock
93	2690	2597	Sand & shale
2690	2725	35	Shale
2725	2870	145	Shale & sand
2870	2954	84	Shale
2954	3004	50	Shale & sand
3004	3148	144	Shale
3148	4568	1420	Shale & Sand
4568	4632	64	Shale & sand
4632	4733	101	Shale & sand
4733	5018	285	Shale & lime
5018	5157	139	Lime, shale & sand
5157	5651	494	Lime & shale
5651	5713	62	Lime, shale & anhydrite
5713	5738	25	Lime & shale
Total depth 5738'			
Plugged back depth 5712'			

OVER 1

16-43094-5

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65-407 6-1-53

REVENUE OF BUREAU OF REVENUE  
 RECEIVED BY CHECK  
 OF THE FIELD OFFICE  
 RECEIVED BY THE FIELD OFFICE





UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

ALLOTTEE \_\_\_\_\_  
TRIBE Navajo Tribe "K"  
LEASE NO. I-149-IND-3123

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County San Juan Field Ismay

The following is a correct report of operations and production (including drilling and producing wells) for the month of October, 19 63

Agent's address P.O. Box 810 Company TEXACO Inc.  
Farmington, New Mexico Signed [Signature]

Phone 325-7553 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	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)
SW NE 18	40S	26E	2	31	3,706	42	3,249		878	Pumping
NE NW 18	"	"	3	31	850	42	1,054		2,161	Pumping
SW NW 18	"	"	4	31	68		163		None	Pumping
NE SE 18	"	"	5	31	805	42	262		38	Pumping
NE NE 18	"	"	6	31	62	42	72		None	Pumping
SE SE 18	"	"	7	31	2,232	42	1,647		350	Pumping
NE SW 18	"	"	8	31	3,763	42	3,524		147	Pumping
NE SW 19	"	"	9	31	1,317	42	2,394		728	Pumping
SE SE 18	"	"	10	31	3,257	42	4,300		892	Pumping
NE NE 24	"	25E	11	31	2,038	42	1,729		980	Pumping
SW SE 13	"	26E	13	--	--	--	--		--	Abandoned, Salvaged deferred dry.
					<b>18,098</b>		<b>18,394</b>			

Sold to El Paso Nat'l Gas Co. 18,394 MCF

(USGS (2) RM 244 (1)

RKM(1) RLP (1) OGCC (2) File - 9 11-16-63

\*Oil from this lease is produced into a common tank battery on the Navajo Tribe "J" Lease.

NOTE.—There were \* runs or sales of oil; 18,394 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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

ALLOTTEE \_\_\_\_\_  
TRIBE Navajo Tribe "K"  
LEASE NO. I-149-IND-3123

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Ismay

The following is a correct report of operations and production (including drilling and producing wells) for the month of November, 19 63

Agent's address P.O. Box 810 Company TEXAGO Inc.

Farmington, New Mexico Signed [Signature]

Phone 325-7553 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	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)
SW NE 18	40S	26E	2	30	3,132	42	2,835		664	Pumping
NW NE NE NW 18	"	"	3	30	657	42	336		1,971	Pumping
SW NW 18	"	"	4	30	106	42	89		53	Pumping
NE SE 18	"	"	5	30	776	42	760		35	Pumping
NE NE 18	"	"	6	30	82	42	310		None	Pumping
SW SE SE 18	"	"	7	30	2,175	42	1,128		185	Pumping
NE SW 18	"	"	8	30	3,307	42	4,035		119	Pumping
NE SW 19	"	"	9	30	1,147	42	950		588	Pumping
SW SW SE SE 18	"	"	10	30	2,853	42	4,062		841	Pumping
NE NE 24	"	"	11	28	1,675	42	688		1,010	Pumping
SW SE 13	"	"	13	--	--	--	--		--	Abandoned, Salvaged deferred dry.
					<u>15,910</u>		<u>15,193</u>			

Sold to El Paso Nat'l Gas Co. 15,193 MCF

USGS (2) Rm 244 (1)  
RIM (1) RLP (1) 6888 (2) File - 9 12-16-63

\*Oil from this lease is produced into a common tank battery on the Navajo Tribe "J" Lease.

NOTE.—There were \_\_\_\_\_ runs or sales of oil; 15,193 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.

*Copy*

Form approved.  
Budget Bureau No. 42-R714.4

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

ALLOTTEE \_\_\_\_\_  
TRIBE Navajo Tribe "X"  
LEASE NO. I-149-IND-9123

## LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Ismay

The following is a correct report of operations and production (including drilling and producing wells) for the month of January, 19 64,

Agent's address P. O. Box 810 Company TEXACO Inc.  
Farmington, New Mexico Signed [Signature]

Phone 325-7553 Agent's title District Superintendent

SEC. AND 1/4 OF 1/4	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)
SW NE 18	40S	26E	2	31	2,710	42	1,665		949	Pumping
NE NW 18	"	"	3	29	571	42	276		857	Pumping
SW NW 18	"	"	4	31	90	42	83		90	Pumping
NE SE 18	"	"	5	30	848	42	391		34	Pumping
NE NE 18	"	"	6	0	0		0		None	Pump trouble
SE SE 18	"	"	7	29	2,229	42	1,065		245	Pumping
SE SW 18	"	"	8	31	2,580	42	1,648		129	Pumping
NE SW 19	"	"	9	31	1,201	42	1,845		661	Pumping
SE SE 18	"	"	10	31	2,825	42	2,103		367	Pumping
NE NE 24	"	"	11	31	1,878	42	2,238		1014	Pumping
SW SE 13	"	"	13	-	-	-	-		-	Abandoned, salvaged - deferred dry.
					14,932		11,314			
Sold to El Paso Natural Gas Co.										11,314 MCF
USGS (2)	GA (1)	RRM (1)								
RLP (1)	OGCC (2)	File - 9	2-18-64							

\* Oil from this lease is produced into a common tank battery on the Navajo  
Tribe \_\_\_\_\_ runs or sales of oil; \_\_\_\_\_ M. cu. ft. of gas sold;  
Lease \_\_\_\_\_ 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.

SA  
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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

ALLOTTEE  
TRIBE Navajo Tribe "K"  
LEASE NO. I-149-IND-9123

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Ismay

The following is a correct report of operations and production (including drilling and producing wells) for the month of December, 1964,

Agent's address P. O. Box 810 Company TEXACO Inc.  
Farmington, New Mexico 87401 Signed C. P. Farmer

Phone 325-7553 Agent's title District Supt.

SEC. AND 1/4 OF 1/4	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)
SW NE 18	40S	26E	2	31	3,126	42	2,646		462	Pumping
NE NW 18	"	"	3	31	319	42	2,273		1276	Pumping
SW NW 18	"	"	4	-	-	-	-		-	Shut-in
NE SE 18	"	"	5	28	1,087	42	1,384		80	Pumping
NE NE 18	"	"	6	-	-	-	-		-	Shut-in
SE SE 18	"	"	7	31	1,285	42	1,322		209	Pumping
SE SW 18	"	"	8	31	2,325	42	2,382		151	Pumping
NE SW 19	"	"	9	30	1,074	42	928		951	Pumping
SE SE 18	"	"	10	31	2,717	42	2,982		614	Pumping
NE NE 24	"	"	11	31	1,393	42	1,576		1363	Pumping
SW SE 13	"	"	13	-	-	-	-		-	Abandoned, salvaged deferred dry.
					13,326		15,493			
					Sold to El Paso Natural Gas Co.					13,280 MCF
					Used on Lease					1,909 MCF
					Used on Navajo Tribe "H" Lease					304 MCF
										15,493 MCF
USGS(2) CA(1) RKM(1) RLP(1) OGCC(2) JNH(1) - File - 10										
*Oil from this lease is produced into common tank battery on the Navajo Tribe "J" Lease.										

NOTE.—There were \* runs or sales of oil; 13,280 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.

*Handwritten initials/signature*

*Copy Allert*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

ALLOTTEE \_\_\_\_\_  
TRIBE Navajo Tribe "K"  
LEASE NO. I-149-IND-9123

**LESSEE'S MONTHLY REPORT OF OPERATIONS**

State Utah County San Juan Field Ismay

The following is a correct report of operations and production (including drilling and producing wells) for the month of January, 1965,

Agent's address P. O. Box 810 Company TEXACO Inc.  
Farmington, New Mexico 87401 Signed C. P. Damm

Phone 325-7553 Agent's title District Supt.

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL No.	DATE PRODUCTION	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 results of test for gasoline content of gas)
SW NE 18	40S	26E	2	27	2,667	42	2,328		619	Pumping
NE NW 18	"	"	3	24	198	42	1,329		1337	Pumping
SW NW 18	"	"	4	-	-		-		-	Shut-in
NE SE 18	"	"	5	30	1,172	42	1,667		80	Pumping
NE NE 18	"	"	6	7	45	42	472		None	Pumping
SE SE 18	"	"	7	30	1,228	42	1,189		171	Pumping
NE SW 18	"	"	8	31	2,201	42	1,921		183	Pumping
NE SW 19	"	"	9	30	1,002	42	816		390	Pumping
SE SE 18	"	"	10	31	2,601	42	2,019		429	Pumping
NE NE 24	"	"	11	30	1,279	42	3,038		1169	Pumping
SW SE 13	40S	25E	13	-	-	-	-		-	Abandoned, salvaged deferred dry
					12,393		14,779			
					Sold to El Paso Natural Gas Co.				12,660 MCF	
					Used on Lease				1,897 MCF	
					Used on Navajo Tribe "H" Lease				222 MCF	
									14,779 MCF	

USGS(2) CA(1) RKM(1) RLP(1) OGCC(2) JNH(1) - File - 10  
\*Oil from this lease is produced into common tank battery on the Navajo Tribe "J" Lease.

NOTE.—There were 12,660 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.

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT TO THE STATE  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.  
5. LEASE DESIGNATION AND SERIAL NO.

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.)

1-149-IND-9123  
6. INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo  
7. UNIT AGREEMENT NAME  
Tansy-Flodine Park  
8. FARM OR LEASE NAME  
9. WELL NO.  
Q413  
10. FIELD AND POOL OR WILDCAT  
Tansy  
11. SEC. T. B. M., OR BLEK AND SURVEY OR AREA  
13, T808, R25E, S1M  
12. COUNTY OR PARISH  
San Juan  
13. STATE  
Utah

1. OIL WELL  GAS WELL  OTHER   
2. NAME OF OPERATOR  
TEXACO Inc.  
3. ADDRESS OF OPERATOR  
Box 810, Farmington, N. M. 87401  
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
At surface  
660' from South Line and 1980' from East Line  
14. PERMIT NO.  
15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5067' DF

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"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	FRACUTRE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input checked="" type="checkbox"/>	(Other)	<input type="checkbox"/>
(Other) Convert to water inject.	<input checked="" type="checkbox"/>		
PULL OR ALTER CASING	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
CHANGE PLANS	<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.)\*

Proposed remedial work is for the purpose of converting well from producing to water injection status. Procedure for workover will be as follows:

Drill out from 5712' to 5750' and perforate casing from 5692' to 5695' and 5698' to 5702' with a total of 20 jet shots. Treat open hole from 5722' to 5750' with 500 gallons of 15% Hcl and 4000 gallons of 28% Hcl acid. Treat perforations 5692' to 5702' with 200 gallons of 15% Hcl and 1500 gallons of 28% Hcl acid. Treat perforations 5666' to 5680' with 2000 gallons of 28% Hcl acid. Run plastic coated tubing with injection packer at 5600' and commence water injection.

APPROVED BY UTAH OIL AND GAS CONSERVATION COMMISSION  
DATE: 1-28-66 by Paul W. Burchell  
CHIEF PETROLEUM ENGINEER

18. I hereby certify that the foregoing is true and correct  
SIGNED: E. C. HALL TITLE: District Superintendent DATE: 1-25-66

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT 1 DATE\*  
(Other ins. on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

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.  
**1-149-IND-0123**

6. INDIAN, ALLOTTEE OR TRIBE NAME  
**Mesa**

7. RIGHT AGREEMENT NAME  
**Energy-Flaming Park**

8. FARM OR LEASE NAME

9. WELL NO.  
**0413**

10. FIELD AND POOL, OR WILDCAT  
**Energy**

11. SEC. T., R., M. OR B.L. AND SURVEY OR AREA  
**13, T40S, R25E, S14N**

12. COUNTY OR PARISH  
**San Juan**

13. STATE  
**Utah**

1. OIL WELL  GAS WELL  OTHER  **Water Injection Well**

2. NAME OF OPERATOR  
**TEXACO Inc.**

3. ADDRESS OF OPERATOR  
**Box 810, Farmington, New Mexico 87401**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface  
**660' from South line and 1980' from East line**

14. PERMIT NO. **-**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**5067' DF**

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 checked="" 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 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.)\*

**Reason for workover was to convert well from temporarily abandoned to water injection status.**

**Commenced workover 2-3-66.**

**Drilled out retainer at 5710' and cement to 5738' and ran hole to 5750'. Perforated casing from 5692' to 5695', 5698' to 5702' (4" casing) with a total of 20 jet shots. Treated open hole from 5722' to 5750' with 500 gallons of 15% HCL acid followed by 4000 gallons of 28% HCL acid. Treating pressure was 5000 psi with an injection rate of 9 barrels per minute. Instant shut-in pressure was 2800 psi. Treated perforations 5692' to 5702' with 200 gallons of 15% HCL acid. Perforations communicated. Reset packer and treated perforations 5666' to 5702' with 3500 gallons of 28% HCL acid. Treating pressure was 5500 psi with an injection rate of 9 barrels per minute. Instant shut-in pressure was 3000 psi. Ran 2-3/8" plastic lined tubing with a Model P injection packer and set packer at 5607'. On 2 1/2 hour test ending 3-6-66, 1694 barrels of water was injected into well at a treating pressure of 1700 psi.**

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

SIGNED *[Signature]* TITLE **District Superintendent** DATE **1/25/66**

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

COMMISSIONERS

C. S. THOMSON  
CHAIRMAN

C. R. HENDERSON  
M. V. HATCH  
J. H. REESE  
D. M. DRAPER

EXECUTIVE DIRECTOR

C. B. FEIGHT



PETROLEUM ENGINEERS

PAUL W. BURCHELL  
CHIEF ENGINEER

THE STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

348 EAST SOUTH TEMPLE  
SUITE 301  
SALT LAKE CITY, UTAH 84111

DAvis 8-5771

March 17, 1966

Texaco, Inc.  
P. O. Box 810  
Farmington, New Mexico

Gentlemen:

On January 26th and 28th we received Notices of Intention to Convert the following wells to Water Injection. However, as of this date, we have not received subsequent reports on the operations conducted:

Ismay Flodine Park Unit No. T 118,  
Sec. 18, T. 40 S., R. 26 E.

Ismay Flodine Park Unit No. T 316,  
Sec. 16, T. 40 S., R. 26 E.

Ismay Flodine Park Unit No. T 318,  
Sec. 18, T. 40 S., R. 26 E.

Ismay Flodine Park Unit No. T 122,  
Sec. 22, T. 40 S., R. 26 E.

Ismay Flodine Park Unit No. T 117,  
Sec. 17, T. 40 S., R. 26 E.

Ismay Flodine Park Unit No. V 128,  
Sec. 28, T. 40 S., R. 26 E.

Ismay Flodine Park Unit No. T 119,  
Sec. 19, T. 40 S., R. 26 E.

Ismay Flodine Park Unit No. Q 413,  
Sec. 13, T. 40 S., R. 25 E.

Ismay Flodine Park Unit No. T 120,  
Sec. 20, T. 40 S., R. 26 E.

Ismay Flodine Park Unit No. T 121,  
Sec. 21, T. 40 S., R. 26 E.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

A handwritten signature in cursive script, reading "Annette R. Hansen".

ANNETTE R. HANSEN  
RECORDS CLERK

arh

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)

FORM NO. DOGM-UIC-1

IN THE MATTER OF THE APPLICATION OF  
Texaco Inc.  
 ADDRESS P. O. Box EE  
Cortez, Colorado ZIP 81321  
 INDIVIDUAL      PARTNERSHIP      CORPORATION X  
 FOR ADMINISTRATIVE APPROVAL TO DISPOSE OR  
 INJECT FLUID INTO THE IFPU - Q413 WELL  
 SEC. 13 TWP. 40S RANGE R25E  
San Juan COUNTY, UTAH

CAUSE NO. \_\_\_\_\_

ENHANCED RECOVERY INJ. WELL   
 DISPOSAL WELL

APPLICATION

Comes now the applicant and shows the Division the following:

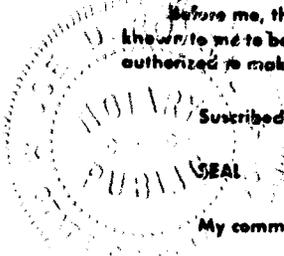
1. That Rule 1-5 (b) 6 authorizes administrative approval of enhanced recovery injections or disposal operations.
2. That the applicant submits the following information.

Lease Name <u>Ismay-Flodine Park</u> Unit	Well No. <u>Q 413</u>	Field <u>Ismay</u>	County <u>San Juan</u>
Location of Enhanced Recovery Injection or Disposal Well <u>SW 1/4 - SE 1/4</u> Sec. <u>13</u> Twp. <u>40S</u> Rge. <u>25E</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>10-62</u>	
Depth-Base Lowest Known Fresh Water Within 1/2 Mile <u>1000'</u>	Does Injection Zone Contain Oil-Gas-Fresh Water Within 1/2 Mile <u>YES</u> <input checked="" type="checkbox"/> <u>NO</u> <input type="checkbox"/>	State What <u>Oil &amp; Gas</u>	
Location of IFPU Producing Wells and Injection Source(s) <u>3 Source wells</u>	Geologic Name(s) and Depth of Source(s) <u>Ismay +/- 5600</u> <u>Salt Wash, Entrada &amp; Navajo</u> <u>490 - 1215</u>	Geologic Name of Paradox-Ismay Injection Zone	
Geologic Name of Paradox-Ismay Injection Zone	Depth of Injection Interval <u>5666 to 5750</u>	a. Top of the Perforated Interval: <u>5666'</u>	
	b. Base of Fresh Water: <u>1000'</u>	c. Intervening Thickness (a minus b) <u>4666'</u>	
Is the intervening thickness sufficient to show fresh water will be protected without additional data? <u>(YES)</u> <input checked="" type="checkbox"/> <u>NO</u> <input type="checkbox"/>			
Lithology of Intervening Zones <u>Sandstone, Limestone, Anhydrite w/intermittent shale layers</u>			
Injection Rates and Pressures Maximum _____ <u>500 B/D</u> <u>2300 PSI</u>			
The Names and Addresses of Those To Whom Copies of This Application and Attachments Have Been Sent <u>The Navajo Tribe</u> <u>Box 146</u> <u>Window Rock, Arizona 86515</u>			

State of Colorado )  
 County of Montezuma )  
Alvin R. Mary Field Supt.  
 Applicant

Before me, the undersigned authority, on this day personally appeared Alvin R. Mary  
 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.

Subscribed and sworn to before me this 16<sup>th</sup> day of Dec., 19 83



Joe A. Roybal  
 Notary Public in and for Colorado

My commission expires 10/25/87

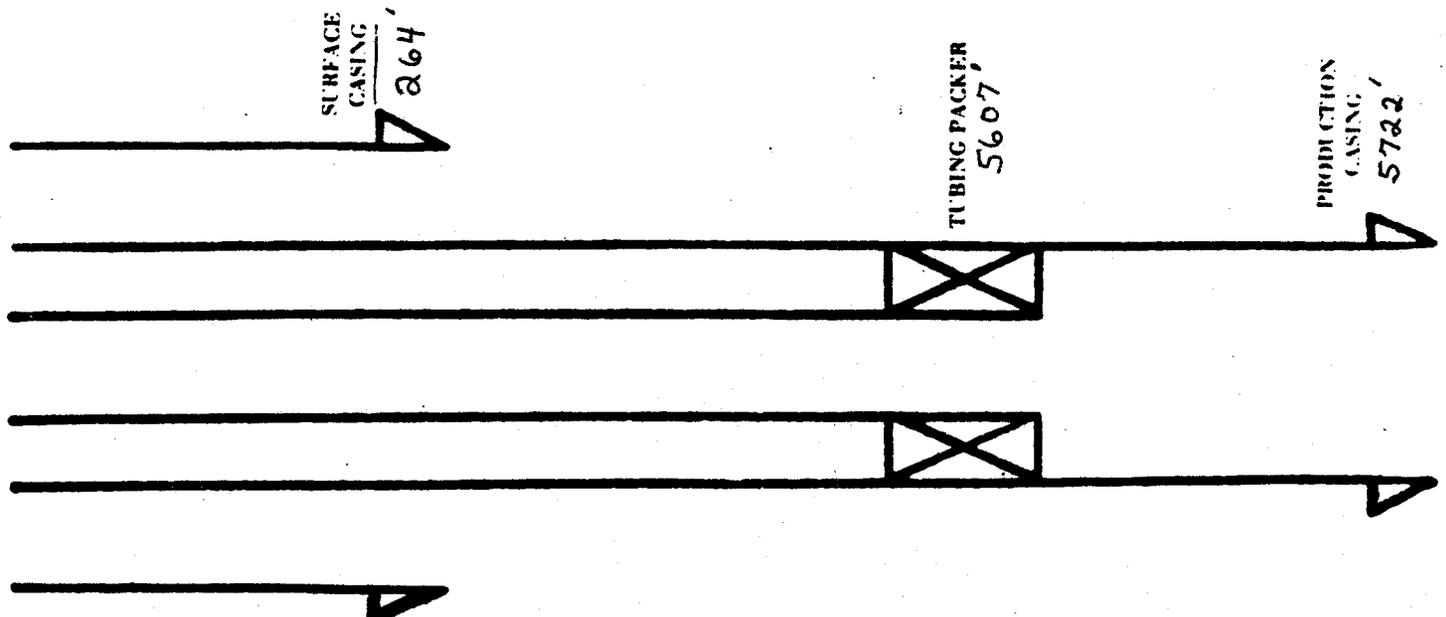
(OVER) 728 N. Beech, Cortez, Co. 81321

1. Attach qualitative and quantitative analysis of fresh water from 2 or more producing wells within 1 mile of injection well showing location of wells and date samples were taken, or statement as to why samples were not submitted.
2. Attach qualitative and quantitative analysis of representative sample of water to be injected.
3. Attach plot showing subject well and all known oil and gas wells, abandoned, drilling and dry holes within 1/2 mile, together and with name of operator.
4. Attach Drillers Log (Form DOGM-UIC-2). (Appropriate Surety must be on file with Conservation Division.)
5. Attach Electric or Radioactivity Log of Subject well (if released).
6. 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.
7. The original and 6 copies of application, and one complete set of attachments shall be mailed to the Division.
8. Deliver 1 copy of application to landowner on whose land injection well is located and to each operator of a producing leasehold within 1/2 mile of injection well.
9. Affidavit of mailing or delivery shall be filed not later than five days after the application is filed.
10. Notice that an application has been filed shall be published by the Division in a newspaper of general circulation in the county in which the well is located. The Division shall file proof of publication before the application is approved. The notice shall include 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 will be approved administratively.
11. A well shall not be used for injection or disposal unless completed machine accounting Form DOGM-UIC-3b is filed September 1st, each year.
12. 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.
13. If there is less intervening thickness required by Rule I-5 (b) 4 attach sworn evidence and data.

CASING AND TUBING DATA

NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
Surface	7 5/8"	264'	200	Circulated	
Intermediate					
Production	4 1/2"	5722'	550	Circulated	
Tubing	2 3/8"	5607'	4 1/2" Name - Type - Depth of Tubing Packer Model P - Retrievable - 5607		
Total Depth	Geologic Name - Inj. Zone		Depth - Top of Inj. Interval	Depth - Base of Inj. Interval	
5738	ISMAV		5666	5750	

SKETCH - SUBSURFACE FACILITY

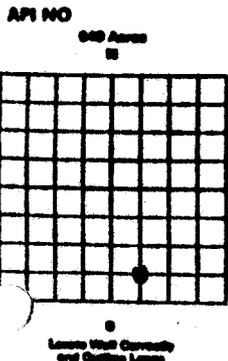


PLEASE TYPE OR USE BLACK INK ONLY

(To be filed within 30 days after drilling is completed) I-149-IND-9143

DEPARTMENT OF NATURAL RESOURCES AND ENERGY

DIVISION OF OIL, GAS, AND MINING  
Room 4241 State Office Building  
Salt Lake City, Utah 84114



COUNTY San Juan SEC. 13 TWP. 40S RGE. 25E  
COMPANY OPERATING Texaco Inc.  
OFFICE ADDRESS P. O. Box EE  
TOWN Cortez STATE ZIP Colo 81321  
FARM NAME Ismay-Flodine WELL NO. Q 413  
DRILLING STARTED 8-20-62 DRILLING FINISHED 10-9-62  
DATE OF FIRST PRODUCTION \_\_\_\_\_ COMPLETED 10-9-62  
WELL LOCATED 1/4 SW 1/4 SE 1/4  
660 FT. FROM SE OF 1/4 SEC. & 7300 FT. FROM WL OF 40 SEC.  
ELEVATION DERRICK FLOOR 5065 GROUND 5055

TYPE COMPLETION

Single Zone ISMAY Order No. NA  
Multiple Zone \_\_\_\_\_ Order No. \_\_\_\_\_  
Comingled \_\_\_\_\_ Order No. \_\_\_\_\_

LOCATION EXCEPTION \_\_\_\_\_ Order No. \_\_\_\_\_ Penalty \_\_\_\_\_

OIL OR GAS ZONES

Name	From	To	Name	From	To
<u>ISMAY</u>	<u>5666</u>	<u>5750</u>			

CASING & CEMENT

Casing Set				Cag. Test		Cement	
Size	Wgt	Grade	Feet	Psi	Size	Fillup	Top
<u>7 5/8"</u>	<u>15.28</u>		<u>264'</u>	<u>500</u>	<u>200</u>	<u>NA</u>	<u>CIRCULATED</u>
<u>4 1/2"</u>	<u>9.5</u>		<u>5722'</u>	<u>1000</u>	<u>550</u>	<u>NA</u>	<u>CIRCULATED</u>

TOTAL DEPTH 5750'

PACKERS SET DEPTH 5607'

COMPLETION & TEST DATA BY PRODUCING FORMATION

	1	2	3
FORMATION	<u>Ismay</u>	<u>ISMAY</u>	
SPACING & SPACING ORDER NO.	<u>80 acre</u>		
CLASSIFICATION (Oil; Gas; Dry; Inj. Well)	<u>OIL</u>	<u>00 2/3/66</u> <u>CONV 20WI</u>	
PERFORATED	<u>5666'-5702</u>		
INTERVALS	<u>5722-5750 open</u>		
ACIDIZED?	<u>700 gal 15% HCL</u> <u>7500 gal 28% HCL</u>		
FRACTURE TREATED?	<u>NO</u>		

INITIAL TEST DATA

Date	<u>NA</u>	<u>3/6/66</u>	
Oil. bbl./day	<u>NA</u>		
Oil Gravity			
Gas. Cu. Ft./day			
Gas-Oil Ratio Cu. Ft./Bbl.			
Water-Bbl./day		<u>1694 BWTAD/1700psi</u>	
Pumping or Flowing			
CHOKE SIZE			
FLOW TUBING PRESSURE			

A record of the formations drilled through, and pertinent remarks are presented on the reverse. (use reverse side)

I, the undersigned, being first duly sworn upon oath, state that this well record is true, correct and complete according to the records of this office and to the best of my knowledge and belief.

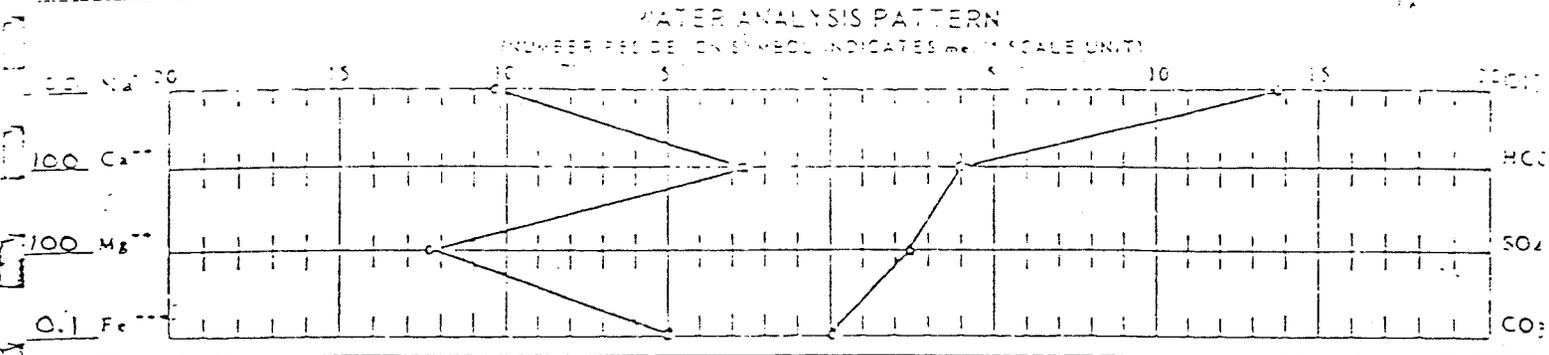
Telephone 1-303-565-8401 Alvin R. Mance Field Supt  
State of Colorado  
County of Montezuma  
Subscribed and sworn before me this 16<sup>th</sup> day of December, 19 83  
My Commission Expires Joe B. Roybal  
10/25/87 728 N. Beech, Cortez, Co.  
81321

WATER ANALYSIS REPORT

NL Treating Chemicals/NL Industries, Inc.

P.O. Box 1675, Houston, Texas 77001

COMPANY <b>TEXACO, INCORPORATED</b>						SHEET NUMBER <b>1</b>
FIELD <b>ANETH</b>						DATE <b>5 APRIL 1982</b>
WELL SIGNATURE OR NO. <b>INJECTION WATER</b>				COUNTY OR PARISH <b>SAN JUAN</b>	STATE <b>UTAH</b>	
DEPTH (FT.)	SAT. P.	SAMPLE SOURCE <b>PLANT</b>	TEMP. F.	WATER FLD. DAY	DIL. FLD. DAY	GAL. PROD. / DAY
DATE SAMPLED <b>5 APRIL 1982</b>		TYPE OF WATER <input type="checkbox"/> PRODUCED <input checked="" type="checkbox"/> SUPPLY <input checked="" type="checkbox"/> WATERFLOOD <input type="checkbox"/> SALT WATER -				



DISSOLVED SOLIDS		DISSOLVED GASES	
<b>CATIONS</b>		<b>PHYSICAL PROPERTIES</b>	
Total Hardness	392.0 mg/l*	pH	6.65
Calcium, Ca <sup>++</sup>	268.0 mg/l*	Eh (Redox Potential)	N.D. MV
Magnesium, Mg <sup>++</sup>	124.0 mg/l*	Specific Gravity	N.D.
Iron (Total) Fe <sup>+++</sup>	0.5 mg/l*	Turbidity (JTU Units)	N.D.
Barium, Ba <sup>++</sup>	—	Total Dissolved Solids (calc.)	81385.3 mg/l*
Sodium, Na <sup>+</sup> (calc.)	1035.1 mg/l*	Corrosivity Index @ 77 F	+0.39
<b>ANIONS</b>		@ 140 F	+1.32
Chloride, Cl <sup>-</sup>	1380.3 mg/l*	CaSO <sub>4</sub> Solubility @ 77 F	306.6 mg/l*
Sulfate, SO <sub>4</sub> <sup>-2</sup>	24.5 mg/l*	@ 176 F	306.8 mg/l*
Carbonate, CO <sub>3</sub> <sup>-2</sup>	0.0 mg/l*	Max. CaSO <sub>4</sub> Possible (calc.)	24.5 mg/l*
Bicarbonate, HCO <sub>3</sub> <sup>-</sup>	4.0 mg/l*	Max. BaSO <sub>4</sub> Possible (calc.)	1.0 mg/l*
Hydroxyl, OH <sup>-</sup>	0.0 mg/l*	Residual Hydrocarbons	N.D. ppm(l)
Sulfide, S <sup>-2</sup>	18.8 mg/l*		

SUSPENDED SOLIDS (QUALITATIVE)  
 Iron Sulfide  Iron Oxide  Calcium Carbonate  Acid Insoluble

REMARKS AND RECOMMENDATIONS:  
**WATER SHOWS A TENDENCY TOWARD SCALING; PRIMARILY CALCIUM CARBONATE**

\* NOTE: mg/l and mg/l are commonly used interchangeably for ppm and ppb respectively. Where ppm and ppb used, corrections should be made specific gravity.

ENGINEER <b>MARK BROTHERS</b>	DIST. NO. <b>12</b>	ADDRESS <b>CARMINGTON, N.M.</b>	OFFICE PHONE <b>505-325-5701</b>	HOME PHONE <b>505-325-</b>
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INSTRUCTIONS - CANCELS LETTER: SI OF

SIGNED BY

PERMANENT

ROUTINE

TEMPORARY

TEXACO

19

(LOCATION)

(DATE)

Subject: Water Analysis from Navajo Aquifer

Aneth Unit H415

Location - SE 1/4 - SE 1/4 Sec 15, T40S, R24E

Sample Date - 1-17-59

Depth - Navajo Aquifer

Temp - 67° F

Ph - 8.7

Total Dissolved Solids - 2573 ppm

SiO<sub>2</sub> - 16 ppm

CO<sub>3</sub><sup>=</sup> - 130 ppm

Ca<sup>+</sup> - 7 ppm

HCO<sub>3</sub><sup>-</sup> - 156 ppm

Mg<sup>++</sup> - 28 ppm

SO<sub>4</sub><sup>=</sup> - 599 ppm

Na<sup>+</sup> - 76 ppm

Cl<sup>-</sup> - 757 ppm

Aneth Unit G422

Location - SW 1/4 - SE 1/4 Sec 22, T40S, R24E

Sample Date - 1-18-59

Depth - Navajo Aquifer

Temp - 67° F

Ph - 9.2

Total Dissolved Solids - 2823 ppm

SiO<sub>2</sub> - 17 ppm

CO<sub>3</sub><sup>=</sup> - 925 ppm

Ca<sup>+</sup> - 6 ppm

HCO<sub>3</sub><sup>-</sup> - 912 ppm

Mg<sup>++</sup> - 8 ppm

SO<sub>4</sub><sup>=</sup> - 265 ppm

Na<sup>+</sup> - 915 ppm

Cl<sup>-</sup> - 271 ppm

\* Note: these numbers were obtained from Texaco Files in the Denver Division offices

If letter requires reply prepare in triplicate, forwarding original and duplicate, and retain copy.

P.O. Box 2100

Denver, CO 80201

By

CHECKLIST FOR INJECTION WELL APPLICATION AND FILE REVIEW

Operator: Super Well No. Isma Fildine Park 9 413  
 County: San Juan T 405 R 25E Sec. 13 API# 43-037-16456  
 New Well  Conversion  Disposal Well  Enhanced Recovery Well

	YES	NO
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  
 Analysis of Injection Fluid Yes  No  TDS 81385  
 Analysis of Water in Formation to be injected into Yes  No  TDS 81385

Known USDW in area Margo Depth 1000'  
 Number of wells in area of review 2 Prod. 0 P&A 1  
 Water 0 Inj. 1

Aquifer Exemption Yes  NA   
 Mechanical Integrity Test Yes  No   
 Date \_\_\_\_\_ Type \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Reviewed by: [Signature]

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 1004-0  
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.)

5. LEASE DESIGNATION AND SERIAL NO.  
I-149-IND-9123

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo

7. UNIT AGREEMENT NAME  
Ismay-Flodine Park

8. FARM OR LEASE NAME

9. WELL NO.  
Q413

10. FIELD AND POOL, OR WILDCAT  
Ismay

11. SEC., T., R. N. OR BLM. AND  
SUBSTR. OR AREA  
SLM

Sec. 13, T40S, R25

12. COUNTY OR PARISH 13. STATE  
San Juan Utah

1. OIL WELL  GAS WELL  OTHER Water Injection Well **RECEIVED**

2. NAME OF OPERATOR

Texaco Inc.

AUG 07 1985

3. ADDRESS OF OPERATOR

P.O. Box EE, Cortez, CO.81321

DIVISION OF OIL  
GAS & MINING

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

660' FSL & 1930' FEL

14. PERMIT NO.

43-037-16455

16. ELEVATIONS (Show whether DF, RT, UR, etc.)

5067' DF

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) Shut-In

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 or 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 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.)

Texaco Inc. requests approval for extending the Shut-in period for Q413. The well is currently shut-in pending economic consideration of possible implementation of tertiary recovery methods.

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

SIGNED Ch. R. Mann

TITLE Area Supt

DATE 8/1/85

(This space for Federal or State office use)

APPROVED BY Dean B. Ferguson

TITLE VIC Manager

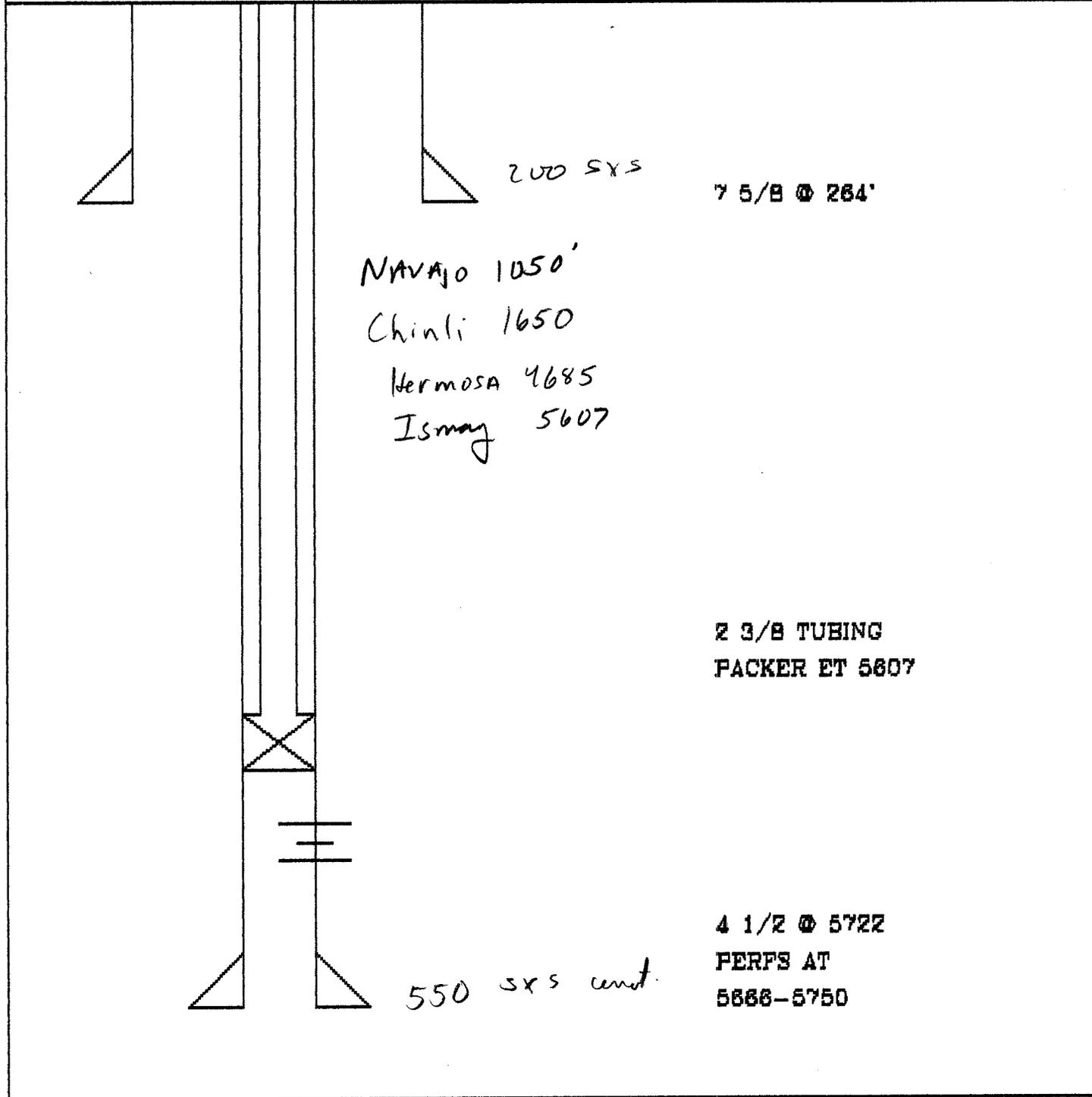
DATE 8-9-85

CONDITIONS OF APPROVAL, IF ANY:

BLM (4) - UOGCC (3) - AJS-JNH-ARM - Navajo Tribe

WELL Q-413	OPERATOR TEXACO	LOCATION 13-40S-25E
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COMMENTS	COUNTY SAN JUAN
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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

**RECEIVED**

MAR 18 1991

1. Type of Well  
 Oil Well    Gas Well    Other   **INJECTION**

2. Name of Operator  
**Texaco Inc.**

3. Address and Telephone No.  
**3300 N. Butler, Farmington N.M. 87401 (505) 325-4397**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**660' FSL, & 1930' FEL,  
 SW/SE Sec. 13, T40S / R25E**

5. Lease Designation and Serial No.  
**I-149-IND-9123**

6. If Indian, Allottee or Tribe Name  
**Navajo**

7. If Unit or CA, Agreement Designation  
**Ismay-Flodine Park**

8. Well Name and No.  
**Q413 (Navajo Tribe k-13)**

9. API Well No.  
**43-037-16455 PA**

10. Field and Pool, or Exploratory Area  
**Ismay**

11. County or Parish, State  
**San Juan, Utah**

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input checked="" type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> 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.)\*

11-29-90 MIRU, TIH W/ stinger on 2-3/8" tbg. 12-3-90 Pump 85 Sx. Class 'G' neat cmnt down 2-3/8" tbg. TOH, RU wireline service and perf 4-1/2" csg. W/4 js @ 4665'. Set wireline ret. at 4550' TIH W/ stinger on workstring pump into tubing @ 0 BPM and 2200 psi. Sting out of retainer and spot 25 Sx. class 'G' neat cmnt on retainer. TOH. Perf @2650' W/2 J2, RIH W/ wireline set retainer and set at 2550'. TIH W/ stinger, pump down tubing @0 BPM and 2000 psi. Spot 25 Sx. Class 'G' neat cmnt on retainer, TOH to 1620' spot 9 Sx. class 'G' neat to 1530'. TOH to 50' pump cmnt to surface.

12-4-90 cut off deadmen and wellhead, classify plugged and abandoned.

NOTE: Mr. Herman Lujan with the Farmington BLM was on location during the plugging.

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

Signed *Alan A. Klein* Title Area Manager Date 3/6/91

(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