


APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: TRIUMPH EXPLORATION, INC.
ADDRESS: P. O. BOX 10280, MIDLAND, TEXAS 79702-7280
CONTACT PARTY: STELLA SWANSON PHONE: 915/687-4220
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project: X Yes No
If yes, give the Division order number authorizing the project R-9082 (WFX 689)
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: STELLA SWANSON, CPL TITLE: LANDMAN
SIGNATURE:  DATE:
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 12271 Exhibit No. 3
Submitted by: Triumph Exploration, Inc.
Hearing Date: October 21, 1999

DISTRIBUTION: Original and one cc

late District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, PO Box 2088, Santa Fe, NM 87504-2088 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

**LIST OF EXHIBITS
FORM C-108**

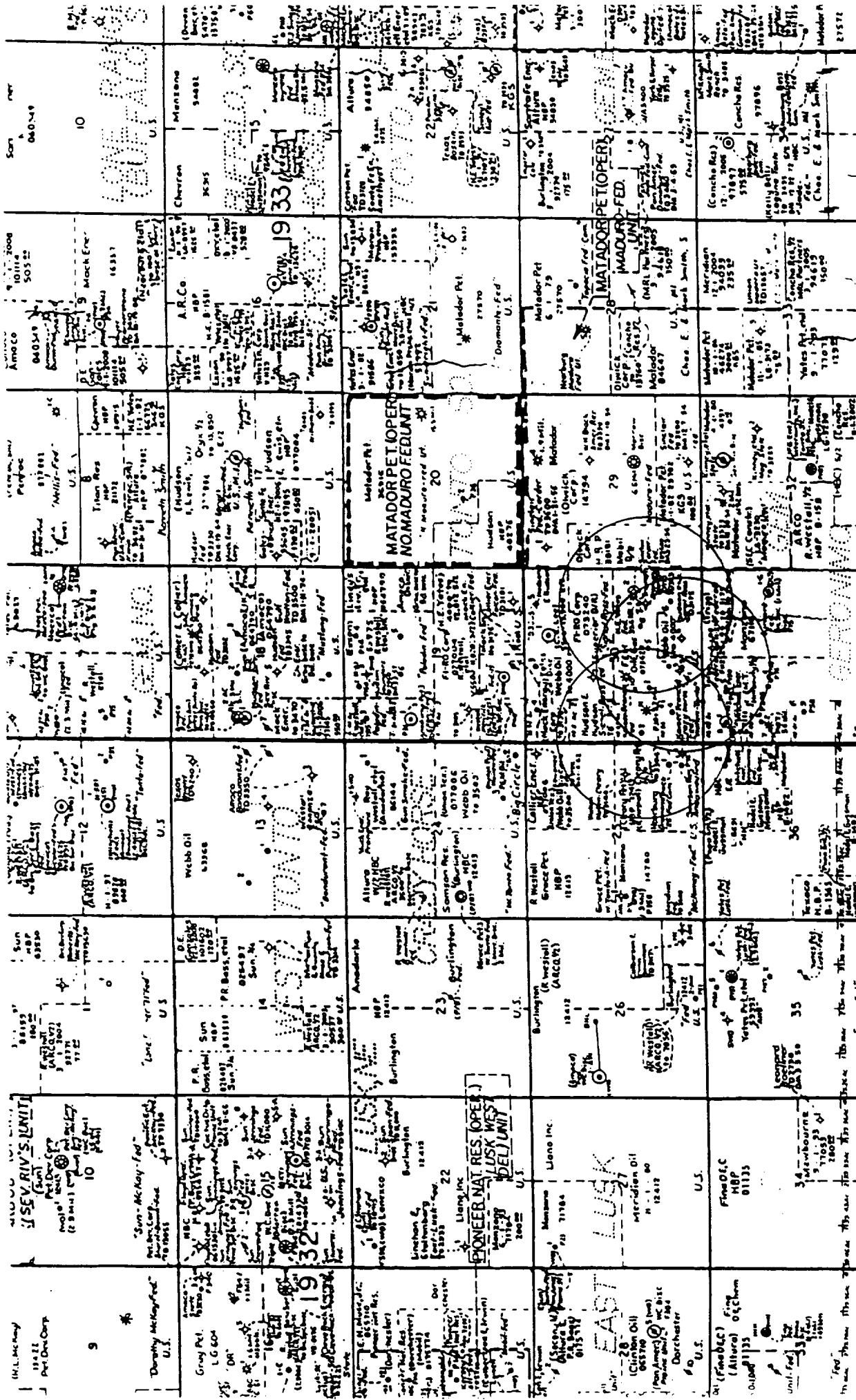
EXHIBIT A	MAP REQUIRED BY PARAGRAPH V
EXHIBIT B	TABULAR SUMMARY AND SCHEMATICS REQUIRED BY PARAGRAPH VI
EXHIBIT C	DATA SHEET ON PROPOSED OPERATION REQUIRED BY PARAGRAPH VII
EXHIBIT D	GEOLOGICAL DATA - PARAGRAPH VIII
EXHIBIT E	DATA SHEET ON PROPOSED STIMULATION PROGRAM BY PARAGRAPH IX
EXHIBIT F	LOGS OF INJECTION WELLS - PARAGRAPH X
EXHIBIT G	WATER ANALYSIS OF PRODUCED WATER TO BE RE- INJECTED - PARAGRAPH XI
EXHIBIT H	AFFIRMATIVE STATEMENT PER PARAGRAPH XII
EXHIBIT I	NOTICE REQUIREMENTS - PARAGRAPH XIII

TRIUMPH EXPLORATION, INC.

TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO

EXHIBIT A

MAPS



TRIUMPH EXPLORATION, INC
TONTON PROJECT
EXHIBIT A
AREA OF REVIEW MAP
PROPOSED WIW'S
TONTON #2, #7, and #9Y
SEC 30, 519S, R33E

5

[illegible]

TRIUMPH EXPLORATION, INC.

TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO

EXHIBIT B

TABULAR SUMMARY AND SCHEMATICS

SEE EXCELL LL/SUSAN-EX/TRIUMPH TONTO PROJECT

TRIUMPH EXPLORATION, INC.
TONTA PROJECT

EXHIBIT B
TABULAR SUMMARIES

PAGE 1

Operator Well Name, Number	Location Unit, Sec., Twp., Range	Type	Spudded	Date	Completed	TD	PBD	Zones	Perfs and Well Construction	Record of Completion	Depth	TOC
Wallen Production Co. Wallen-Cleary Well No. 1 API 30-025-26712	I, Sec 25, T19S, R32E 2310' FSL & 990' FEL	P & A 6/30/80	3/8/80		6/30/80	3140	.....	Yates	Perfs: Casing: 13 3/8 @ 225/300 sx 10 3/4 @ 590' PLD 8 5/8 @ 880' PLD 7 @ 2990/1000 sx			
Clearly Petroleum Hi-Yo Silver Fed. Well No. 1 API 30-025-26028	P, Sec. 25, T19S, R32E 660 FSL & 330 FEL	P & A 10/18/78	7/31/78		.....	3304	.....	Yates Seven Rivers	Perfs: 3032-3152 Casing: 8 5/8 @ 1180/850 sx			circ
Grace Petroleum Andaway "25" Fed Well No. 1 API 30-025-31327	P, Sec 25, T19S, R32E 660 FSL & 660 FEL	Oil	8/3/91	2/2/92	7920	5510		Bone Spr	Perfs: 5112-7616 Casing: 13 3/8 @ 500/450 sx 8 5/8 @ 4510/2650 sx 5 1/2 @ 7918/1100 sx			
Sinclair O & G Co. Carder-Federal Well No. 2 API 30-025-01699	I, Sec 30, T19S, R33E 1980' FSL & 660' FEL	P & A	2/17/56 P & A 3/29/56		.....	5600	.....	Delaware	Perfs: Open Hole Casing: 10 3/4 @ 305/250 sx			surf-calc
Triumph Exploration, Inc. Tonto Well No. 7 API 30-025-25897	I, Sec 30, T19S, R33E 1650' FSL & 990' FEL	D & A	5/17/78 P & A 7/15/78 P B 9/8/97 5/15/99 WW		.....	3113	.....	Seven Rivers	Perfs: NA Casing: 13 3/8 @ 225/330 sx 7 @ 2900/1000 sx			circ clic
Triumph Exploration, Inc. Tonto Well No. 8 API 30-025-27435	J, Sec 30, T19S, R33E 1790' FSL & 1710' FEL	Oil	10/16/81	2/20/82	3120	3115		Yates Seven Rivers	Perfs: 2980-3110 Casing: 13 3/8 @ 115/500 sx 7 @ 2940/1000 sx 4 1/2 @ 2612-3120/60 sx			circ clic 2625-temp
Triumph Exploration, Inc. Tonto Well No. 5 API 30-025-25584	J, Sec 30, T19S, R33E 1650' FSL & 2310' FEL	Oil	6/30/77	8/25/77	3094	3094		Seven Rivers	Perfs: Open Hole Casing: 13 3/8 @ 277/500 sx 7 @ 2884/1000 sx			circ clic
Kaiser-Francis Federal 30 Well No. 2 API 30-025-27671	K, Sec 30, T19S, R33E 2310' FSL & 1980 FWL	Gas	12/18/81	3/4/83	13800	13753		Morrow	Perfs: 13372-440 Casing: 13 3/8 @ 1315/1050 sx 9 5/8 @ 5315/3181 sx 5 1/2 @ 13800/72360 sx			surf-calc surf-calc 1263-calc
Triumph Exploration, Inc. Tonto Well No. 3 API 30-025-25589	K, Sec 30, T19S, R33E 1650' FSL & 1650 FWL	Oil	8/31/77	10/21/77	3073	3073		Seven Rivers	Perfs: Open Hole 2850-3073 Casing: 13 3/8 @ 220/500 sx 7 @ 2850/1000 sx			circ clic

TRIUMPH EXPLORATION, INC.
 TONTO PROJECT

EXHIBIT B
 TABULAR SUMMARIES

PAGE 2

Operator			Location		Type	Date		Depth		Record of Completion	
Well Name, Number	Unit, Sec., Twp., Range		Spudded	Completed		TD	PBD	Zones	Perfs and Well Construction	TOC	
Wm. & Edward R. Hudson Signal Ross Well No. 2 API NA	J, Sec 30, T19S, R33E 1980' Fnl & 2004' FWL	P & A 9/27/06	9/5/61	9/22/61	3173	.....	Yates	Perfs: 3016-24 3026-29 3033-36 Casing: 8 5/8 @ 103/90 sx 5 1/2 @ 3168/100 sx		
Triumph Exploration, Inc. Tonto Well No. 2 API 30-025-25420	L, Sec 30, T19S, R33E 1925 FSL & 330 FWL	Oil	12/26/76	2/24/77	3095	.....	Yates Seven Rivers	Perfs: none Casing: 13 3/8 @ 230/175 sx 7 @ 1901/1021 sx		circ circ
Triumph Exploration, Inc. Tonto Well No. 11 API 30-025-27371	L, Sec 30, T19S, R33E 1700 FSL & 990 FWL	Oil	7/8/81	10/22/81	3088	.....	Yates	Perfs: 2980-3064 Casing: 13 3/8 @ 110 sx 7 @ 2850/1000 sx		circ circ
Triumph Exploration, Inc. Tonto Well No. 1 API 30-025-25371	N, Sec 30, T19S, R33E 990' FSL & 2310' FWL	Oil	10/15/76	12/5/76	3082	3082	Yates Seven Rivers	Perfs: Open Hole 2996-3082 Casing: 13 3/8 @ 225/100 sx 7 @ 2896/1000 sx		circ circ	
Triumph Exploration, Inc. Tonto Well No. 9 API 30-025-26343	N, Sec 30, T19S, R33E 600' FSL & 2300' FWL	J & A	9/20/80 P & A 10/8/80	.....	570	.....	.....	Perfs: NA Casing: 13 3/8 300 sx		
Triumph Exploration, Inc. Tonto Well No. 9Y API 30-025-27190	N, Sec 30, T19S, R33E 660' FSL & 2300' FWL	Oil	10/12/80	3/18/81	3086	3086	Yates Seven Rivers	Perfs: 2970-3080 Open Hole 3084-86 Casing: 10 3/8 @ 225/450 sx 7 @ 2800'/1100 sx 4 1/2 @ 2617-3083/60 sx		Circ circ 2617-circ	
Triumph Exploration, Inc. Tonto Well No. 12 API 30-025-31591	N, Sec 30, T19S, R33E 460' FSL & 1980' FWL	Oil	6/7/92	12/4/92 T/A	9450	8915	BS-Delaware	Perfs: 7536-7682 8978-9124 Casing: 13 3/8 @ 450'/430 sx 8 5/8 @ 3400/2155 sx 5 1/2 @ 9450/725 sx D. V. @ 6945/760 sx		circ circ circ circ	
Edward Hudson Signal Ross-Fed Well No. 6 API 30-025-20560	O, Sec 30, T19S, R33E 660' FSL & 1980' FEL	D & A	2/10/64 P & A 3/12/64	.....	3127	.....	Yates Seven Rivers	Perf: Not reported Casing: 13 3/8 @ 65'/100 sx 5 1/2 @ 3115/730 sx		surf-calc 2810-stub
Triumph Exploration, Inc. Tonto Well No. 6 API 30-025-25591	P, Sec 30, T19S, R33E 990' FSL & 990' FEL	Oil	2/8/78	4/28/78	3096	3085	Yates Seven Rivers	Perfs: 2986-3080 Casing: 13 3/8 @ 210'/300 sx 7 @ 2901'/1420 sx 4 1/2 @ 2600-3096/60 sx		circ circ 2600-circ	

TRIUMPH EXPLORATION, INC.
TONTO PROJECT

EXHIBIT B
TABULAR SUMMARIES

PAGE 3

Operator Well Name, Number	Location Unit, Sec., Twp., Range	Type	Spudded	Completed	TD	Depth	Record of Completion	Zones	Perfs and Well Construction	TOC
John H. Trigg Federal RB 31 Well No. 1 PA Schematic on File	B, Sec 31, T19S, R33E 330' FNL & 2310' FEL	J & A	9/18/64 P & A 10/2/64	.....	700	.....	Perfs: NA Casing: 13 3/8 @ 85'50 sx	.....	Perfs: NA Casing: 13 3/8 @ 85'50 sx	surf-calc
Manzano Oil Corp. Federal 31-G Well No. 4 API 30-025-21116	B, Sec 31, T19S, R33E 335' FNL & 2223' FEL	Oil	10/3/64 P & A 10/27/64 re-entered 9/23/93	.....	3225	3139	Perfs: 2884-3104 Casing: 8 5/8 @ 5007/300 sx 4 1/2 @ 3225/1000 sx	Yates Seven Rivers	Perfs: 2884-3104 Casing: 8 5/8 @ 5007/300 sx 4 1/2 @ 3225/1000 sx	circ clic
Manzano Oil Corp. Federal 31-G Well No. 2 API 30-025-31354	B, Sec 31, T19S, R33E 400' FNL & 2310' FEL	Oil	11/30/91	2/15/92	9400	5530	Perfs: 5130-5237 Casing: 13 3/8 @ 365/1370 sx 8 5/8 @ 4200/1620 sx 5 1/2 @ 5915/400 sx	BS-Delaware	Perfs: 5130-5237 Casing: 13 3/8 @ 365/1370 sx 8 5/8 @ 4200/1620 sx 5 1/2 @ 5915/400 sx	circ clic clic
Mitchell Energy Corp. Geronimo Federal Well No. 5 API 30-025-31312	C, Sec 31, T19S, R33E 660' FNL & 660' FWL	Oil	8/9/91	11/4/91	10500	10408	Perfs: 8938-9083 Casing: 13 5/8 @ 527/525 sx 8 5/8 @ 4198/700 sx 5 1/2 @ 10491/1450 sx	Bone Spr.	Perfs: 8938-9083 Casing: 13 5/8 @ 527/525 sx 8 5/8 @ 4198/700 sx 5 1/2 @ 10491/1450 sx	circ clic clic thru DV @ 7906
Mitchell Energy Corp. Geronimo Federal Well No. 10 API 30-025-31533	C, Sec 31, T19S, R33E 660' FNL & 1575' FWL	Oil	3/17/92	4/8/92	3250	3150	Perfs: 2962-3190 Casing: 8 5/8 @ 507/275 sx 4 1/2 @ 3249/1050 sx	Yates	Perfs: 2962-3190 Casing: 8 5/8 @ 507/275 sx 4 1/2 @ 3249/1050 sx	clic clic
Mitchell Energy Corp. Geronimo Federal Well No. 1 API 30-025-30645	D, Sec 31, T19S, R33E 660' FNL & 660' FSL	Oil	10/25/89	12/29/89	10564	10491	Perfs: 9852-10002 Casing: 13 3/8 @ 1298/730 sx 8 5/8 @ 3355/750 sx 5 1/2 @ 10562/725 sx	Bone Spr.	Perfs: 9852-10002 Casing: 13 3/8 @ 1298/730 sx 8 5/8 @ 3355/750 sx 5 1/2 @ 10562/725 sx	clic
Mitchell Energy Corp. Geronimo Federal Well No. 3 API 30-025-31174	D, Sec 31, T19S, R33E 660' FNL & 585' FWL	Oil	3/7/91	3/30/91	3250	3174	Perfs: 2973-3101 Casing: 8 5/8 @ 525/310 sx 4 1/2 @ 2350/1105 sx	Yates	Perfs: 2973-3101 Casing: 8 5/8 @ 525/310 sx 4 1/2 @ 2350/1105 sx	clic
Mitchell Energy Corp. Geronimo Federal Well No. 6 API 30-025-31376	E, Sec 31, T19S, R33E 1725' FNL & 660' FWL	Oil	9/24/91	11/24/91	7900	7816	Perfs: 7570-7658 Casing: 13 5/8 @ 518/475 sx 8 5/8 @ 2908/1175 sx 5 1/2 @ 7900/950 sx	Bone Spr.	Perfs: 7570-7658 Casing: 13 5/8 @ 518/475 sx 8 5/8 @ 2908/1175 sx 5 1/2 @ 7900/950 sx	clic clic
Mitchell Energy Corp. Geronimo Federal Well No. 4 API 30-025-31315	F, Sec 31, T19S, R33E 1980' FNL & 1980' FWL	Oil	7/10/91	8/7/91	10500	10295	Perfs: 9004-10367 Casing: 13 5/8 @ 538/525 sx 8 5/8 @ 2917/1100 sx 5 1/2 @ 10497/1450 sx	Bone Spr.	Perfs: 9004-10367 Casing: 13 5/8 @ 538/525 sx 8 5/8 @ 2917/1100 sx 5 1/2 @ 10497/1450 sx	clic clic clic thru DV @ 3493
Mitchell Energy Corp. Geronimo Federal Well No. 8 API 30-025-31532	F, Sec 31, T19S, R33E 1980' FNL & 1905' FWL	Oil	3/12/92	4/1/92	3150	3080	Perfs: 2950-3003 Casing: 8 5/8 @ 525/150 sx 4 1/2 @ 3149/780 sx	Yates	Perfs: 2950-3003 Casing: 8 5/8 @ 525/150 sx 4 1/2 @ 3149/780 sx	clic clic

SCHEMATICS FOR THE P & A WELLS FROM TABULAR LIST:

WALLEN-CLEARY #1

CLEARY HI YO SILVER #1

SINCLAIR CARDER-FEDERAL #2

SIGNAL ROSS #2

TRIUMPH EXPLORATION, INC. TONTO #9

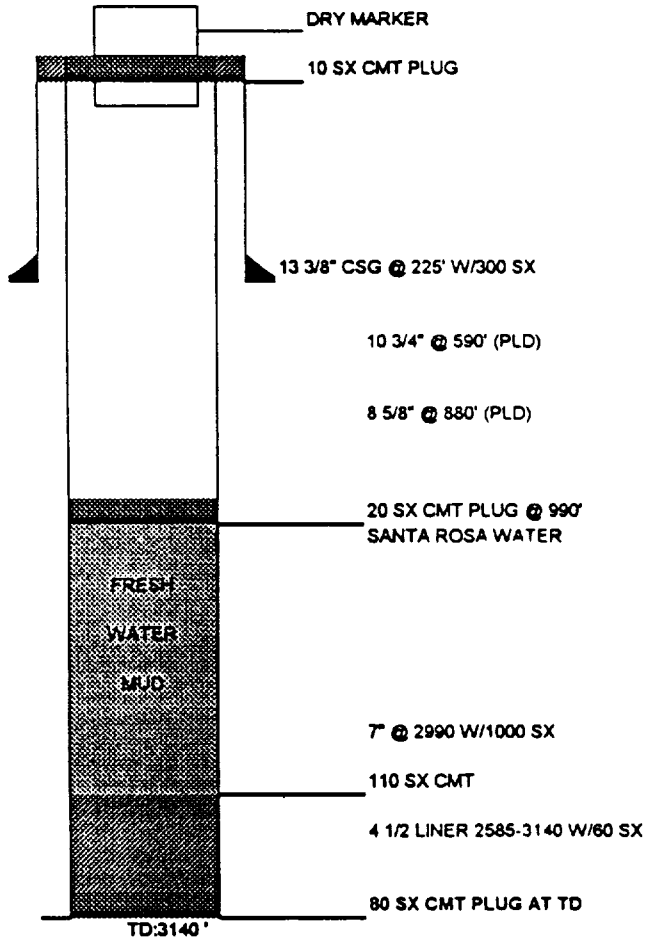
SIGNAL ROSS FEDERAL #6

JOHN H. TRIGG FEDERAL RB3 #1

WALLEN PRODUCTION COMPANY
WALLEN-CLEARY WELL NO. 1
API NO. 30-025-26712

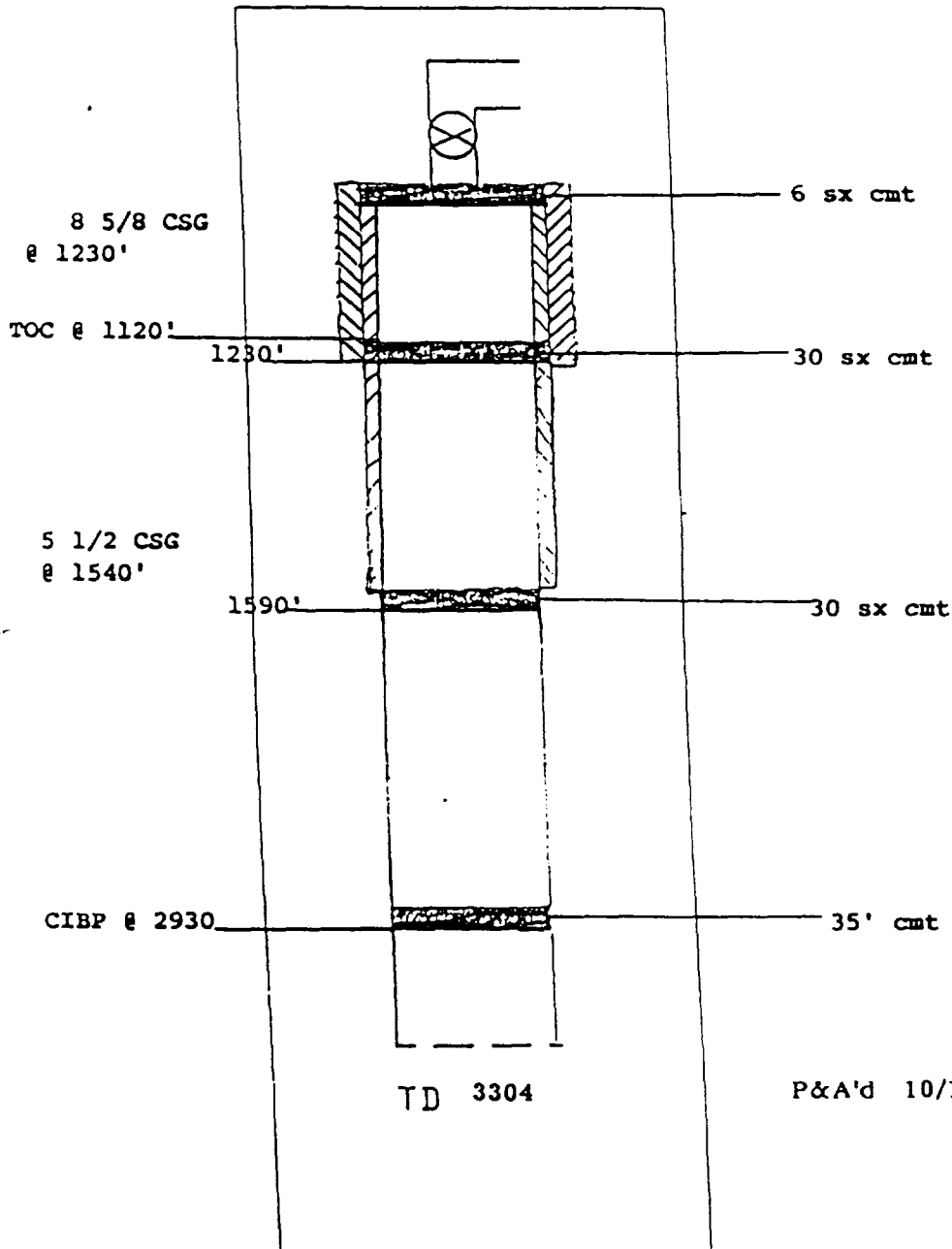
Spud Date: 03/08/80 Completion:

2310' FSL & 990' FEL
SECTION 25, TOWNSHIP 19 SOUTH, RANGE 32 EAST
LEA COUNTY, NEW MEXICO



TRIUMPH EXPLORATION, INC.
TONTA PROJECT
EXHIBIT B
P & A WELLS/OBO
LEA COUNTY, NEW MEXICO

CLEARLY PETROLEUM
 Hi-Yo Silver Fed. #1
 660 FSL & 330 FEL
 Sec 25, T19S, R32E
 Lea County, New Mexico

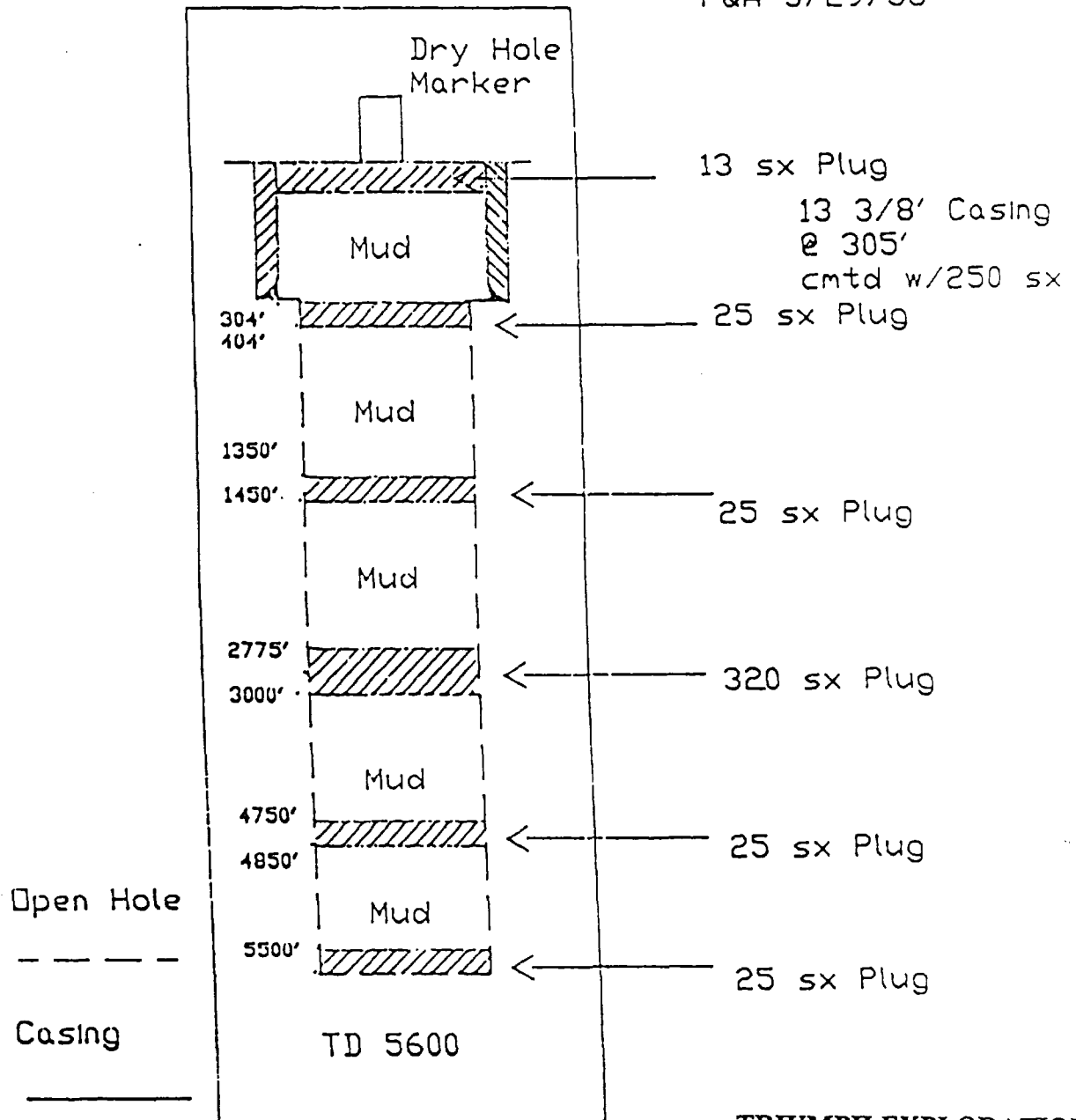


P&A'd 10/18/78

TRIUMPH EXPLORATION, INC.
 TONTO PROJECT
 EXHIBIT B
 P & A WELLS/OBO
 LEA COUNTY, NEW MEXICO

Sinclair Oil & Gas Company
 Carder-Federal Well No. 2
 330' FNL & 2310' FEL
 Sec. 31, T19S, R33E

P&A 3/29/56

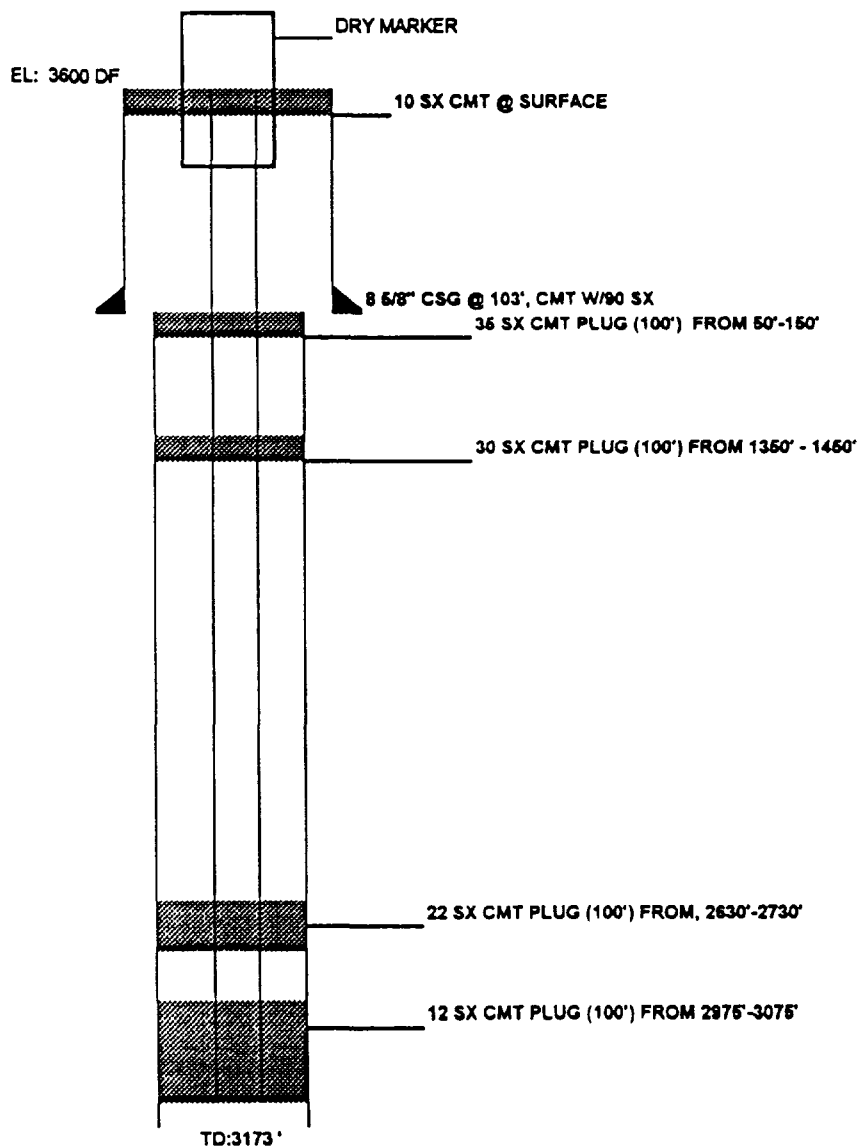


TRIUMPH EXPLORATION, IN
 TONTO PROJECT
 EXHIBIT B
 P & A WELLS/OBO
 LEA COUNTY, NEW MEXICO

WM. A & EDWARD R. HUDSON
SIGNAL ROSS-FEDERAL WELL NO. 2

Spud Date: 09/05/61 Completion: 09/22/61

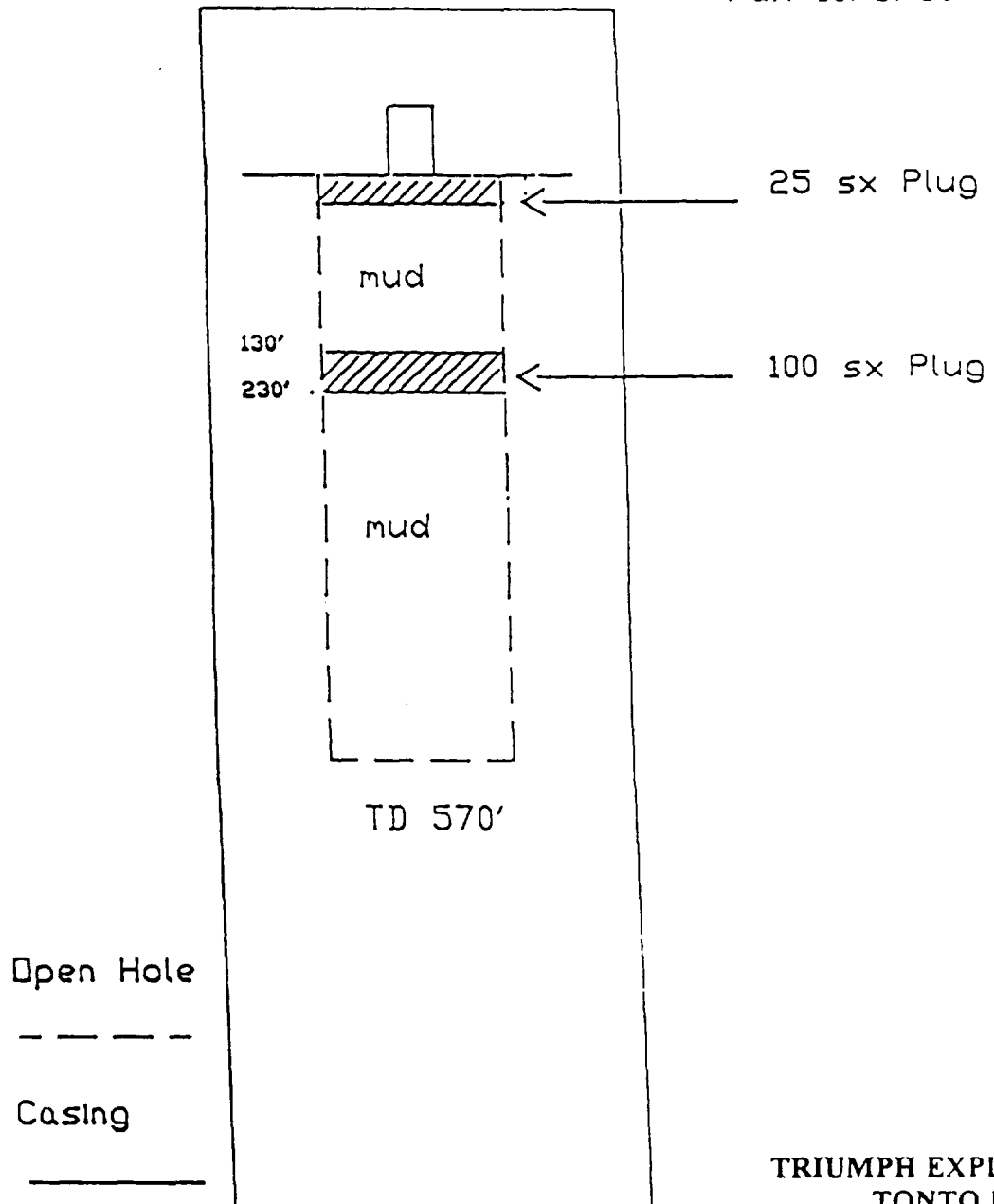
1980' FNL & 2004' FWL
SECTION 30, TOWNSHIP 19 SOUTH, RANGE 33 EAST
LEA COUNTY, NEW MEXICO



TRIUMPH EXPLORATION, INC.
TONTA PROJECT
EXHIBIT B
P & A WELLS/OBO
LEA COUNTY, NEW MEXICO

TRIUMPH EXPLORATION, INC.
TONTA #9
2300' FWL & 600' FSL
SEC 30, T19S, R33E
LEA COUNTY, NEW MEXICO

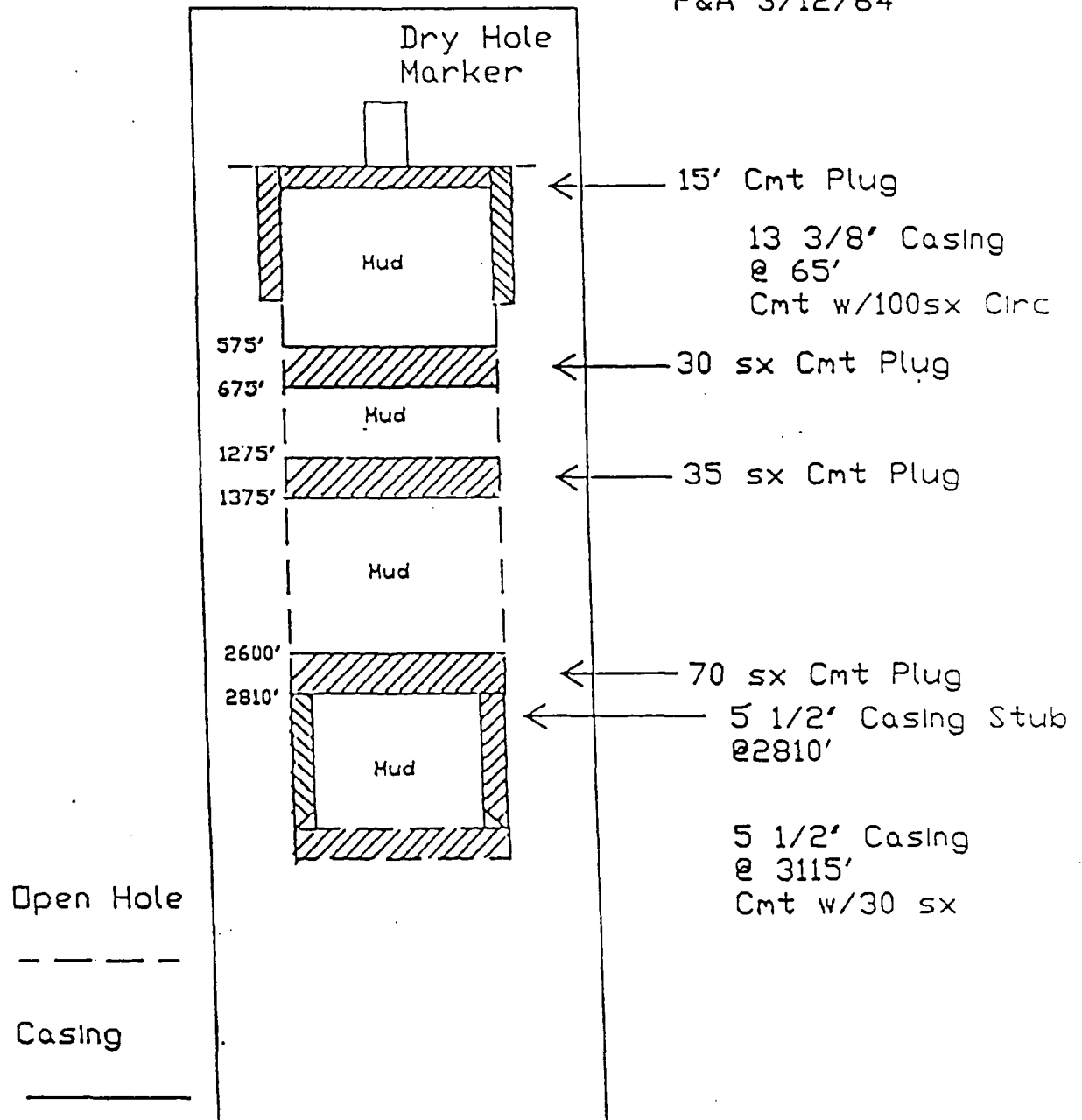
P&A 10/8/80



TRIUMPH EXPLORATION, INC.
TONTA PROJECT
EXHIBIT B
TONTA #9
LEA COUNTY, NEW MEXICO

Edward Hudson
Signal Ross_Fed. Well No. 6
660' FSL & 1980' FEL
Sec. 30, T19S, R33E

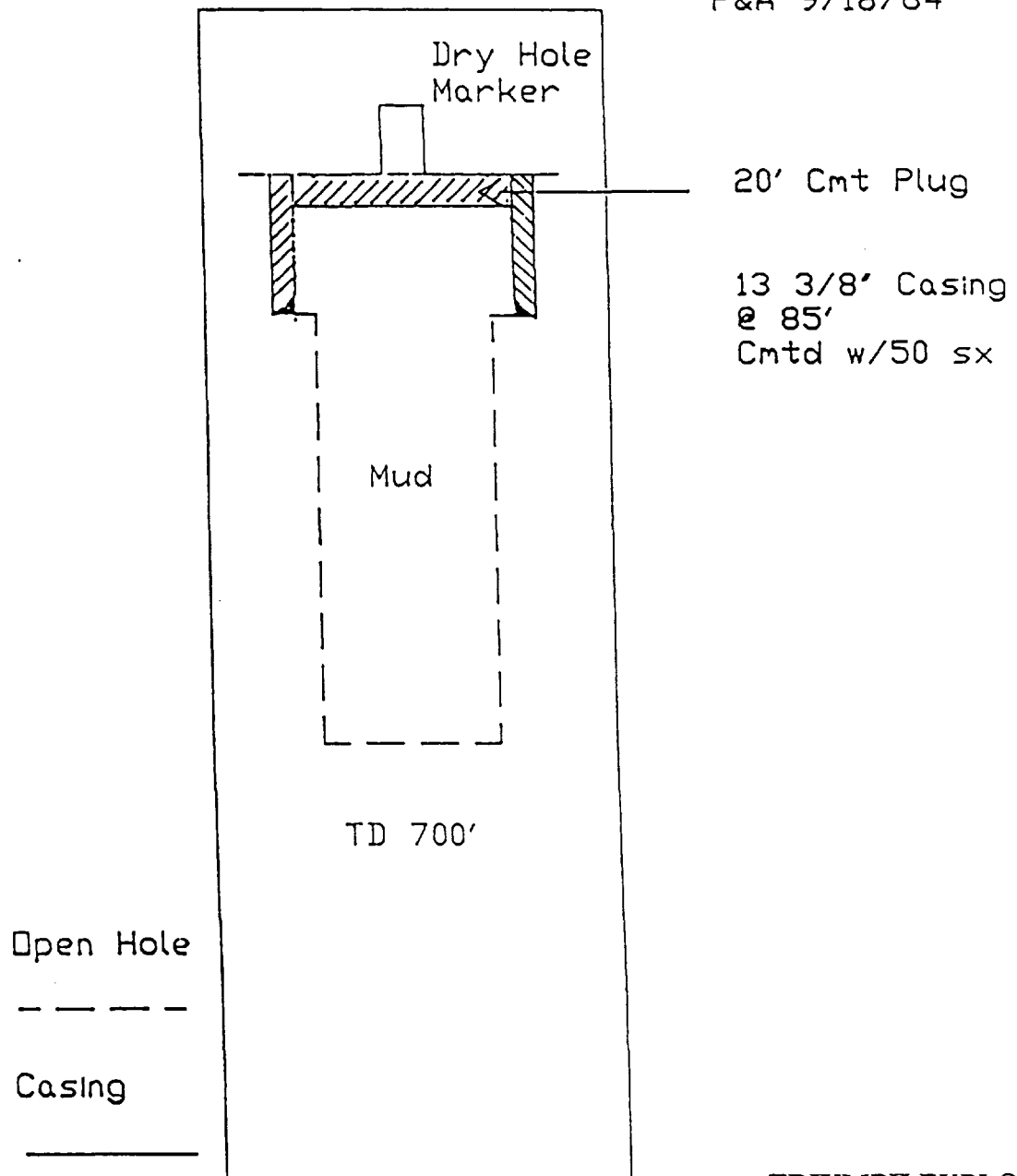
P&A 3/12/64



TRIUMPH EXPLORATION, INC
TONTON PROJECT
EXHIBIT B
P & A WELLS/OBO
LEA COUNTY, NEW MEXICO

John H. Trigg
Federal 'RB' 31 Well No. 1
330' FNL & 2310' FEL
Sec. 31, T19S, R33E

P&A 9/18/64



TRIUMPH EXPLORATION, INC.
TONTON PROJECT
EXHIBIT B
P & A WELLS/OBO
LEA COUNTY, NEW MEXICO

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT C

DATA ON PROPOSED OPERATION

1. **PROPOSED AVERAGE AND MAXIMUM DAILY RATE AND VOLUME OF FLUIDS TO BE INJECTED:**

**AVERAGE DAILY RATE OF 250 BWIPD
MAXIMUM DAILY RATE OF 500 BWIPD**

2. **SYSTEM IS CLOSED.**

3. **PROPOSED AVERAGE INJECTION PRESSURE: 580 PSIG.
PROPOSED MAXIMUM INJECTION PRESSURE: 580 PSIG.**

THE PROPOSED AVERAGE AND MAXIMUM INJECTION PRESSURES ARE TO BE DETERMINED FROM STEP RATE TESTS TO BE RUN AFTER THE WELL IS RE-ENTERED.

4. (A) **SOURCE OF INJECTION FLUID:
PRODUCED WATER FROM THE TONTO YATES SEVEN RIVERS, SOUTH POOL, TONTO #12, CAPITAN REEF, MAKEUP WATER.**
(B) **ANALYSIS OF FORMATION FLUID:
NOT APPLICABLE - RE-INJECTED PRODUCED WATER.**
5. **ZONE OF DISPOSAL IS PRODUCTIVE OF OIL AND GAS WITHIN ONE MILE OF PROPOSED DISPOSAL WELL.**

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT D

LITHOLOGIC AND GEOLOGICAL DATA ON INJECTION ZONE

**TONTO #2
T-19-S, R-33-E, SECTION 30
TD: 3105'**

BASE DOLOMITE	2956'
TOP OF YATES SAND	2956' TO 3000', 44' THICK
DOLOMITE	3000' TO 3044', 44' THICK
TOP OF SECOND YATES SAND	3044' TO 3080', 36' THICK
DOLOMITE	3080' TO 3105' (TD)

POOL:	TONTO, SOUTH
DEPTH:	2956'
FORMATION:	YATES
INJECTION INTERVAL:	2956'-3080'
GEOLOGICAL NAME:	YATES SAND
NET THICKNESS:	80'

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT D

LITHOLOGIC AND GEOLOGICAL DATA ON INJECTION ZONE

**TONTO #9Y
T-19-S, R-33-E, SECTION 30
TD: 3086'**

BASE DOLOMITE	2934'
TOP OF YATES SAND	2934' TO 2974', 40' THICK
DOLOMITE	2974' TO 2988', 14' THICK
SAND	2988' TO 3008', 20' THICK
DOLOMITE	3008' TO 3020', 12' THICK
TOP OF SECOND YATES SAND	3020' TO 3086', 66' THICK

POOL:	TONTO, SOUTH
DEPTH:	2934'
FORMATION:	YATES
INJECTION INTERVAL:	2934'-3008'
GEOLOGICAL NAME:	YATES SAND
NET THICKNESS:	106'

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT E

WELL DATA ON INJECTION WELL #2

STIMULATION PROGRAM:	2000 GALLONS 15% NEFE ACID
LOCATION:	1925 FSL AND 330 FWL SEC 30, T-19-S, R-33-E LEA COUNTY, NEW MEXICO
CASING:	13 3/8" @ 230' CMTD W/ 175 SX 10 3/4" @ 561.63' MUDDERED IN 8 5/8" @ 826.19' MUDDERED IN 7" @ 2901' CMTD W/ 1021 SX
TUBING:	2 3/8" @ 3094' - PLASTIC COATED
PACKER:	BAKER LOC-SET NICKEL PLATED
INJECTION FORMATION:	YATES IN THE TONTO YATES SEVEN RIVERS, SOUTH POOL.
INJECTION INTERVAL:	2900' TO 3113' OPEN HOLE

**WELL WAS ORIGINALLY DRILLED AS OIL PRODUCER.
CURRENTLY PRODUCER.**

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT E

WELL DATA ON INJECTION WELL #7

STIMULATION PROGRAM:	2000 GALLONS 15% NEFE ACID
LOCATION:	990 FEL & 1650 FSL SEC 30, T-19-S, R-33-E LEA COUNTY, NEW MEXICO
CASING:	13 3/8" @ 225' CMTD W/ 300 SX 7" @ 2900' CMTD W/ 200 SX
TUBING:	2 3/8" @ 2800' - PLASTIC COATED
PACKER:	BAKER LOC-SET NICKEL PLATED
INJECTION FORMATION:	YATES IN THE TONTO YATES SEVEN RIVERS, SOUTH POOL.
INJECTION INTERVAL:	2900' TO 3113' OPEN HOLE

**WELL WAS ORIGINALLY DRILLED AS OIL PRODUCER.
NEVER PRODUCED. WAS PLUGGED BACK 9/8/97.
REENTERED 5/15/99 AS WIW.**

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87503

RECEIVED JUN 18 1999

WELL API NO. 30-025-25897
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease 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" (FORM C-101) FOR SUCH PROPOSALS.)			
1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER INJECTION WELL		7. Lease Name or Unit Agreement Name TONT0	
2. Name of Operator TRIUMPH EXPLORATION, INC.		8. Well No. 7	
3. Address of Operator P. O. BOX 10280, MIDLAND, TEXAS 79702-7280		9. Pool name or Wildcat TONT0 YATES SEVEN RIVERS, SOUTH	
4. Well Location Unit Letter I : 1650 Feet From The SOUTH Line and 990 Feet From The EAST Line Section 30 Township 19S Range 33E NMPM LEA County			
10. Elevation (Show whether DF, RKB, RT, GR, etc.)			

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data			
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
ULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: CONVERSION INTO INJECTION WELL <input checked="" type="checkbox"/>	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

TIH W/90 JTS. RICE DUOLINE 10 PC TUBING AND A 7" BAKER LOC-SET PC PACKER-
SET PKR @ 2,852' W/18,000# TENSION. PUMPED 115 BARRELS PACKER FLUID.
PRESSURE BACKSIDE TO 500#. HELD OK - RAN INTEGRITY CHART ON 5-14-99.
CHART OK. PUT WELL ON INJECTION ON 5-15-99.

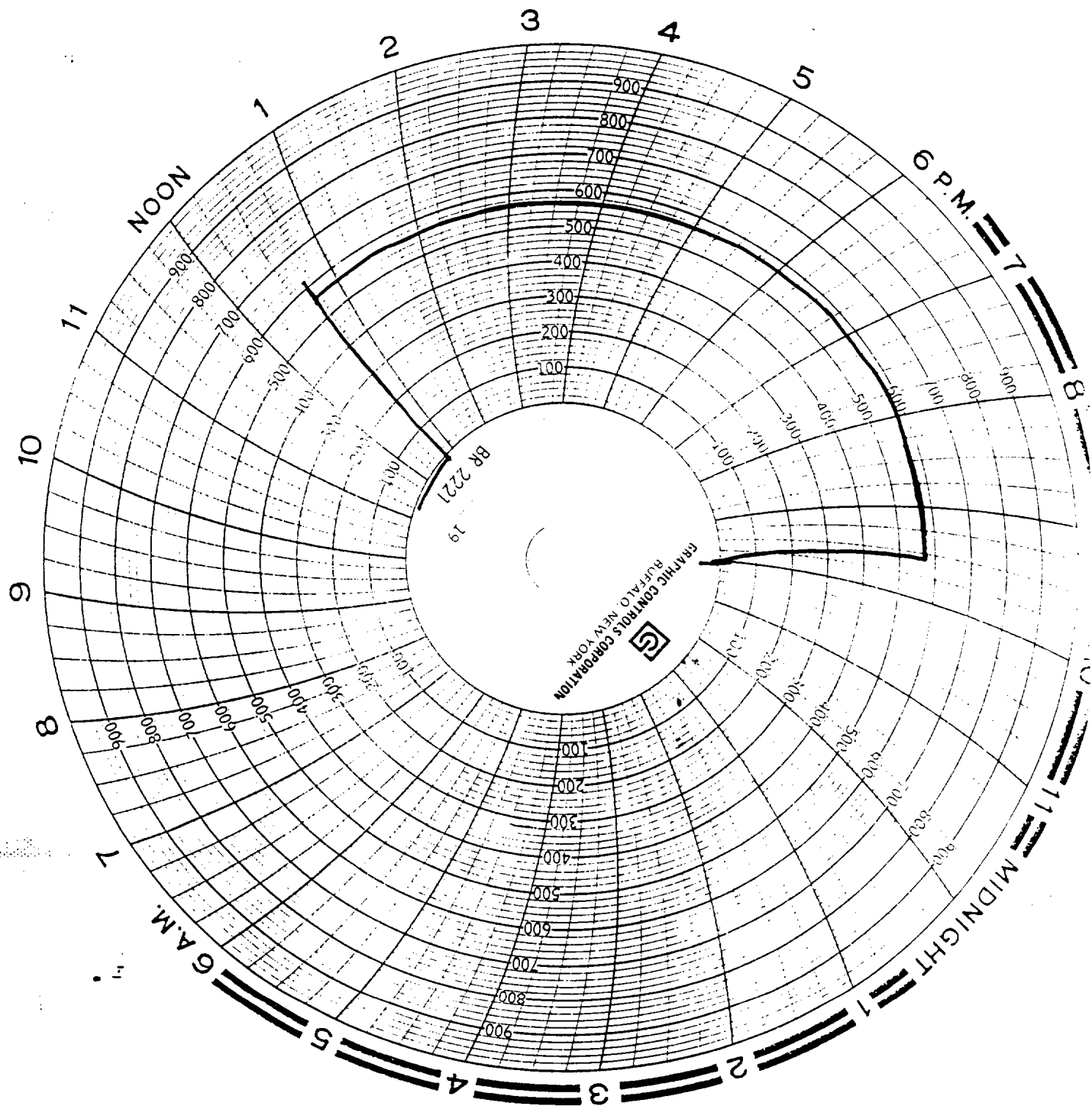
W.F.X-689

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Stella Swanson TITLE MANAGER DATE 05/17/99
TYPE OR PRINT NAME STELLA SWANSON, CPL TELEPHONE NO. 915/687-4220

(This space for State Use)

APPROVED BY _____ ORIGINAL SIGNED BY _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY: _____



TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT E

WELL DATA ON INJECTION WELL #9Y

STIMULATION PROGRAM:	2000 GALLONS 15% NEFE ACID
LOCATION:	990 FEL & 1650 FSL SEC 30, T-19-S, R-33-E LEA COUNTY, NEW MEXICO
CASING:	13 3/8" @ 225' CMTD W/ 450 SX 10 3/4" @ 550' MUDDIED IN 8 5/8" @ 850' MUDDIED IN 7" @ 2800' CMTD W/ 1100 SX
TUBING:	2 3/8" @ 3746' - PLASTIC COATED
PACKER:	BAKER LOC-SET NICKEL PLATED
INJECTION FORMATION:	YATES IN THE TONTO YATES SEVEN RIVERS, SOUTH POOL.
INJECTION INTERVAL:	2900' TO 3113' OPEN HOLE

**WELL WAS ORIGINALLY DRILLED AS OIL PRODUCER.
CURRENTLY PRODUCING.**

TRIUMPH EXPLORATION, INC.

TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO

EXHIBIT F

LOGS OF INJECTION WELLS AND WATER SUPPLY WELL

100m

Common Name: Lea County

Well: Tonto #2

Field: Lea County

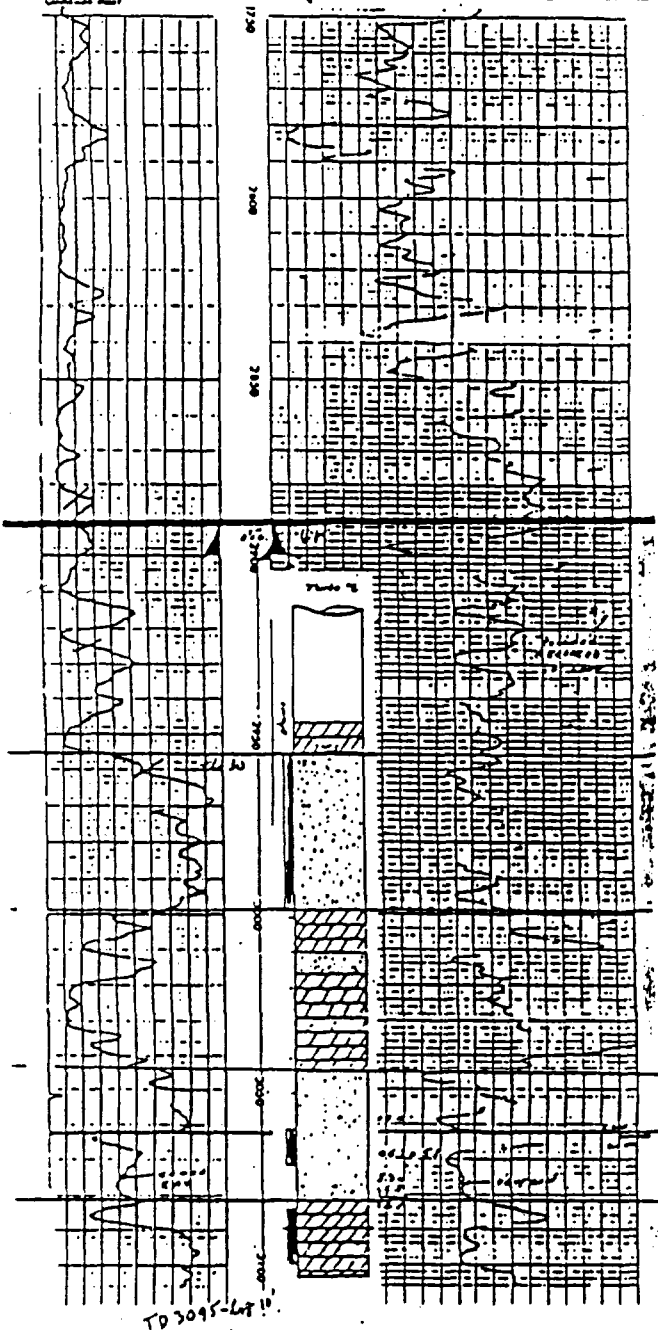
County: Lea State: N.M.

Location: 1000' N. 100' E. of Tonto #1

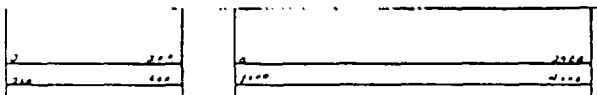
Depth: 1000'

Log: 1000'

Notes: 1000'

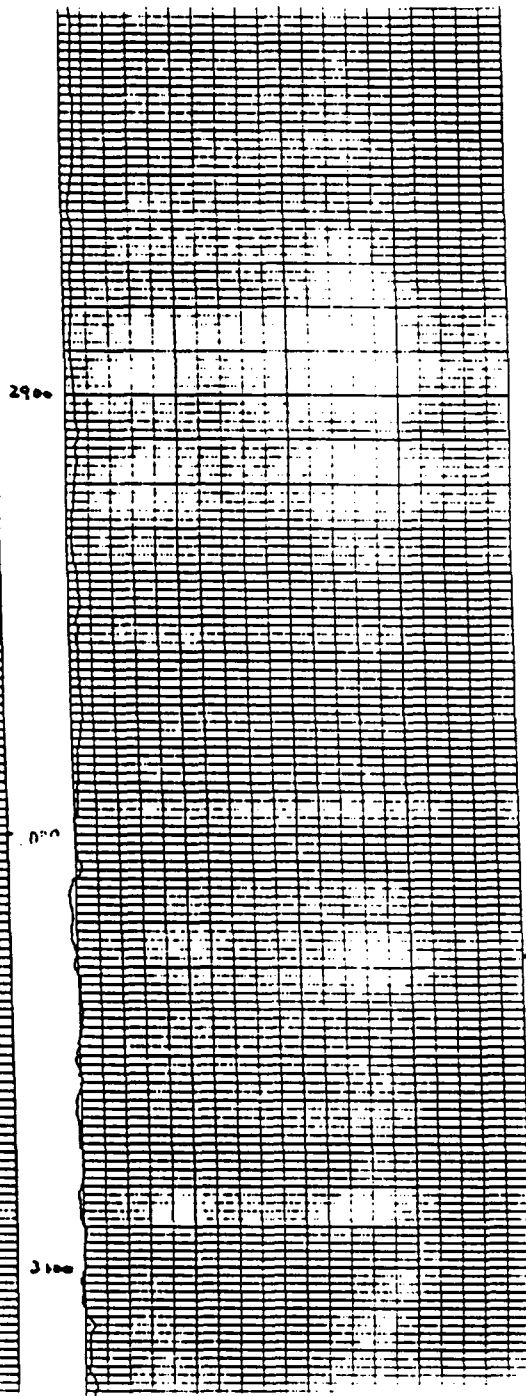
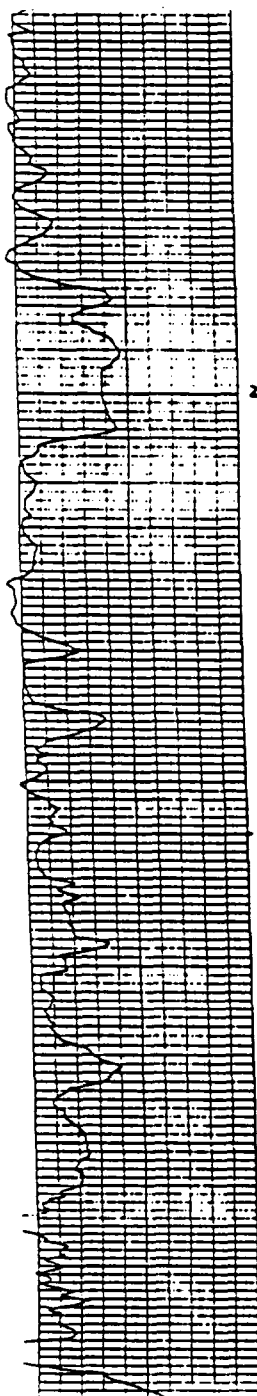


TRIUMPH EXPLORATION, INC.
 TONTO PROJECT
 EXHIBIT F LOG
 TONTO #2
 LEA COUNTY, NEW MEXICO





TRIUMPH EXPLORATION, INC
 TONTO PROJECT
 EXHIBIT F LOG
 TONTO #7
 LEA COUNTY, NEW MEXICO



010-456-0000

30

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT G

WATER ANALYSIS

(WATER ANALYSIS PASTED TO THIS SHEET)

TRIUMPH EXPLORATION, INC.

TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO

EXHIBIT G

WATER ANALYSIS

WATER ANALYSIS REPORT
furnished by TRETOLITE CHEMICALS

COMPANY: WALLEN PRODUCTION
LEASE: TONTO
SAMPLE POINT: HEATER TREATER
SAMPLE DATE: 5-27-87
SAMPLE TEMP.:

pH: 6.5
H₂S: 500
SPECIFIC GRAVITY: 1.025

TITRATED AND CALCULATED IONS

	MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER
HCO ₃	915.00	15.00
Cl	11210.00	315.77
SO ₄	1250.00	26.04
Ca	2800.00	140.00
Mg	0.00	0.00
Na	4986.78	216.82

IONIC STRENGTH = 0.44
TOTAL HARDNESS = 6000.0 mg/ltr.
TOTAL DISSOLVED SOLIDS = 21155.5 mg/ltr.
TOTAL IRON (Fe) = 3.0 ppm

PROBABLE MINERAL COMPOSITION AND ION PAIRING

	MILLIEQUIVALENTS PER LITER	MILLIGRAMS PER LITER
Ca(HCO ₃) ₂	15.00	1215.60
CaSO ₄	26.04	1772.60
CaCl ₂	98.96	5492.19
Mg(HCO ₃) ₂	0.00	0.00
MgSO ₄	0.00	0.00
MgCl ₂	0.00	0.00
NaHCO ₃	0.00	0.00
Na ₂ SO ₄	0.00	0.00
NaCl	216.82	12675.08

CALCULATED SCALING TENDENCIES

SCALING INDEX

CaCO₃ @ 80 DEG F. = 0.5
CaCO₃ @ 120 DEG F. = 1.0

SATURATION POINT

CaSO₄ @ 70 DEG F. = 1996.5 MG/LTR.
CaSO₄ @ 110 DEG F. = 2020.2 MG/LTR.

(THIS SAMPLE CONTAINED 1772.7 MG/LTR. CaSO₄)

TONTO EOR PROJECT
 BY MICRO EMULSION FLOODING
 SECTION 30, T-19-S, R-33-E
 LEA COUNTY, NEW MEXICO

TABLE 1

QUATERNARY WELLS WITH POTABLE WATER

LOCATION	OWNER	ELEV.	WATER LEVEL	TOTAL DEPTH	USE OF WELL	CHEMICAL ANALYSIS (In Milligrams/Liter or Parts/Million)					DATE OF ANALYSIS	SAMPLED BY
						CHLORIDES	SULFATES	DISSOLVED SOLIDS	ELECTRICAL CONDUCTI- VITY			
NW/NW Sec 17 T19S R32E	Snyder Ranch	3650'	116' 1981	131'	Abd. Stock	In 1969 (reported good quality water)						State
SE NE/4 Sec. 26 T19S R32E	Smith		90.9 1978	100'	Active Domestic Stock	298 326	996	2134	2560 --	11/17/65 1/16/78		State Reed
SE SE/4 Sec. 23 T20S R32E	Old Halfway Bar	3551'	36.7' 1981	78'	Abd. Dom.	362	309	--	1861	1969		Reed
NW NW Sec 25 T20S R32E	Smith?	3555'	39 1982	65'	Stock	85 42	82 -	-- --	837 750	1969 9/72		Reed State
NE/4 Sec 36 T20S R32E	Bingham Ranch	3501'	44' 1972	50'	Domestic	290	-	--	1930	9/18/72		State
SW/4 Sec 23 T20S R32E	-	3541'	39.8 1981	-	Stock	No Data						
SE NW/4 Sec 27 T20S R32E	S. Frey	3540'	23.9 1972	25'	Industrial	No Data	(Field check - fresh water)			5/12/82		Reed
SE NW/4 Sec 30 T20S R32E	-	3505'	9.94 1954	-	Stock	No Data						

TRIUMPH EXPLORATION, INC.

EXHIBIT G-2
WATER ANALYSIS

TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO

TABLE 2

QUATERNARY WELLS WITH NON POTABLE WATER

LOCATION	OWNER	ELEV.	WATER LEVEL	TOTAL DEPTH	USE OF WELL	CHEMICAL ANALYSES (In Milligrams/Liter or Parts/Million)					DATE OF ANALYSIS	SAMPLED BY
						CHLORIDES	SULFATES	DISSOLVED SOLIDS	ELECTRICAL CONDUCTI- VITY			
SW of SE/4 Scarbauer Sec 4 T20S R33E	Cattle Co.	3556'	33' 1968	58'	Abd. Stock	2,382 12,978	- 16,068	- -	10,175 -	11/17/65 10/24/68	State United Chem.	
NW NW Sec 21 T20S R33E	-	3536'	35' 1981	52'	Abd. Stock	3,518	905	-	-	10/24/68	United Chem.	
SE NW/4 Sec 12 T20S R32E	-	3540'	-	130'	Abd. Stock	9,744	1,878	-	-	1968	United Chem.	
NE SW/4 Sec 1 T20S R32E	Salt Lake Rch.	3510'	21.7 1954	30'	Abd. Stock	Reported Salty - 1954 and Dry in 1972					State	

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT H

AFFIRMATIVE STATEMENT

TRIUMPH EXPLORATION, INC. HAS EXAMINED AVAILABLE GEOLOGIC AND ENGINEERING DATA AND FINDS NO EVIDENCE OF OPEN FAULTS OR ANY OTHER HYDROLOGIC CONNECTION BETWEEN THE DISPOSAL ZONE AND ANY UNDERGROUND SOURCE OF DRINKING WATER.


TERRELL DOWNING, GEOLOGIST

TRIUMPH EXPLORATION, INC.

**TONTO EOR PROJECT
BY MICRO EMULSION FLOODING
SECTION 30, T-19-S, R-33-E
LEA COUNTY, NEW MEXICO**

EXHIBIT I

PROOF OF NOTICE

PURSUANT TO SECTION XIII OF FORM C-108.

APPLICANT HAS MAILED COPIES OF THE APPLICATION TO THE FOLLOWING:

SURFACE OWNERS:

**BUREAU OF LAND MANAGEMENT
ROSWELL DISTRICT RESOURCE AREA HEADQUARTERS
2909 WEST SECOND STREET
ROSWELL, NEW MEXICO 88201**

ATTN: ARMANDO LOPEZ

LEASEHOLD OPERATORS WITHIN ONE-HALF MILE:

**KAISER-FRANCIS
11722 WEST HIGHWAY 80 EAST
ODESSA, TEXAS 79765**

**MANZANO OIL CORPORATION
P. O. BOX 2107
ROSWELL, NEW MEXICO 88202**

**MITCHELL ENERGY CORPORATION
BOX 4000
THE WOODLANDS, TEXAS 77387-4000**

**NADEL AND GUSSMAN
601 NORTH MARIENFELD, SUITE 508
MIDLAND, TEXAS 79701**

**RODNEY B. WEBB dba
WEBB OIL COMPANY
P. O. BOX 1124
ARTESIA, NEW MEXICO 88211-1124**