Fina Oil and Chemical Company
6 Desta Drive, Suite 4400
Midland, Texas 79705
Post Office Box 2990
Midland, Texas 79702
Office (915) 687-0575

October 28, 1988

RECEIVED
NOV - 2 1988
OIL CONSERVATION DIVISION

Energy, Minerals and Natural Resources Department
Oil Conservation Division
310 Old Santa Fe Trail, Rm. 206
Santa Fe, NM 87503

Attention David Catanach

Gentlemen:

Authority to Inject, Horton Federal #38-H, Section 30, T8S, R35E

On September 9, 1988 we were advised by letter from Mr. Jerry Sexton in the Hobbs office that we had never received an injection permit for the subject well. Further conversation with you enabled me to determine which required items had never been furnished to the Oil Conservation Division.

Form C-108 has been completed and the attachments are with the proper item number to correspond with the list shown on the C-108.

Along with the proof of notice as published we have provided the name and address of the surface owner and the only leasehold operator within one-half mile of the well location. They are being mailed copies of Form C-108, Injection Well Data Sheet and the newspaper publication today.

Please let us know if further information is required.

Very truly yours,

Neva Herndon
Senior Production Clerk

Enc.

cc Ron Smelley w/Enc.
Jerry Sexton, Hobbs w/Enc.
Jerry Nevans

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: [X] Secondary Recovery [ ] Pressure Maintenance [ ] Disposal [ ] Storage
Application qualifies for administrative approval? [ ] yes [ ] no

II. Operator: FINA OIL & CHEMICAL COMPANY

Address: Box 2990, Midland, TX 79702-2990

Contact party: Ronald E. Smelley, Dist.Prod. Mgr. Phone: 915 688-0600

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? [✓] yes [ ] no
If yes, give the Division order number authorizing the project R-3456, R-6171.

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 source 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: Neva Herndon Title Senior Production Clerk

Signature: Neva Herndon Date: 10-26-88

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.

Item III.

INJECTION WELL DATA SHEET

SIDE 1

FINA OIL & CHEMICAL COMPANY	Horton Federal			
OPERATOR	LEASE			
38	1700' FNL, 920' FEL,	30	T-8-S	R-35-E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Schematic

Tabular Data

Surface Casing

Size 8-5/8 " Cemented with 300 sx Cl.C sx.

TOC Surface feet determined by _____

Hole size 12-1/4"

Intermediate Casing

Size _____ " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5-1/2 " Cemented with 1200 sx.Cl.C+ 200 sx.Cl.H sx.

TOC Surface feet determined by _____

Hole size 7-7/8"

Total depth 4805

Injection interval

4716' feet to 4740' feet

(perforated or open-hole, indicate which)

Tubing size 2-3/8" lined with Plastic Coated 4.7# J-55 injection tubing (material) set in a

Elder plastic coated AD-1 injection packer (brand and model) packer at 4610' feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres

2. Name of Field or Pool (if applicable) Milnesand San Andres

3. Is this a new well drilled for injection? /XX/ Yes /__/ No

   If no, for what purpose was the well originally drilled? _____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. 4652' San Andres

Item VI.

Wells of Public Record Within the Area of Review (One-half Mile Radius)

Well No.	Status*	Location	Date Drilled	Depth
5	P	Sec.30,T-8,R-35, 1650 FNL 2244 FEL	6-7-64	4738'
7	I	Sec.30,T-8,R-35, 330 FNL 2241 FEL	6-28-64	4732'
9	I	Sec.30,T-8,R-35, 2310 FSL 2246 FEL	7-21-64	4851'
10	P	Sec.30,T-8,R-35, 330 FNL 921.3 FEL	8-2-64	4766'
11	P&A**I	Sec.30,T-8,R-35, 1650 FNL 924 FEL	8-27-64	4766'
15	I	Sec.30,T-8,R-35, 990 FSL 928 FEL	9-3-64	5396'
17	I	Sec.30,T-8,R-35, 2310 FSL 928.75 FEL	9-17-64	4774'
18	P	Sec.29,T-8,R-35, 1650.5 FNL 330 FWL	9-28-64	4770'
20	I	Sec.29,T-8,R-35, 330 FNL 330 FWL	10-6-64	4764'
21	I	Sec.29,T-8,R-35, 2310 FSL 330 FWL	10-14-64	4775'
25**	I	Sec.29,T-8,R-35, 1650 FNL 1652 FWL	11-24-64	4780'
32	P	Sec.30,T-8,R-35, 285 FEL 2305 FNL	11-23-84	4775'
33	P	Sec.30,T-8,R-35, 2320 FNL 1550 FEL	12-2-84	4774'
34	P	Sec.30,T-8,R-35, 2280 FSL 865 FEL	12-22-83	4800'
35	P	Sec.30,T-8,R-35, 990 FNL 2270 FWL	10-22-84	4810'
36	P	Sec.30,T-8,R-35, 990 FNL 1581 FEL	11-2-84	4806'
37	P	Sec.30,T-8,R-35, 990 FNL 295 FEL	11-12-84	4791'

*Status Code - P = Producing Oil Well, I = Injection Well

**Well bore sketch attached

Except where otherwise indicated copies of completion forms are attached.

Completions Forms for the two wells operated by Union Texas Petroleum are also attached.

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form Approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: SOCONY MOBIL OIL COMPANY, INC.

3. ADDRESS OF OPERATOR: P. O. Box 1800, Hobbs, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 1980' FEL & 660' FSL, Section 19, T8S, R35E
At top prod. interval reported below Same
At total depth Same

5. LEASE DESIGNATION AND SERIAL NO.: LC-060978
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Jacobs Federal
9. WELL NO.: 8 New
10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 19-8S-35E
12. COUNTY OR PARISH: Roosevelt
13. STATE: New Mexico

14. PERMIT NO.:
DATE ISSUED: 11-5-64

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11-11-64	11-24-64	12-1-64	4227.5 RKB	4215.7

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4780	4750	---	→	0-4780	-

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4667-4733

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Laterolog 2400 - 4780 Acoustic GR - 100 - 4769

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24	368	12-1/4	Cem. w/300 sx. + 2% HA5	
4-1/2"	9.5	4780	7-7/8	Cem. w/1660 sx. + 100 sx. Incor Neat	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8	4740	

31. PERFORATION RECORD (Interval, size and number)
4667-4733 - 18 1" Jets holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4667-4733	500 gals. 15% NE Acid
4667-4733	20,000 Refined oil + 40,000# 20-40 Sand + 12 Ball Sealers

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
11-29-64	Flowing - 24/64" ch.	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
12-1-64	24	24/64"	→	504	578	24	1146

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
130	800	→	504	578	24	25.8

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

TEST WITNESSED BY: W. A. Mosley

35. LIST OF ATTACHMENTS

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

SIGNED J. J. McDaniel TITLE Group Supervisor DATE 12-2-64

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

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: LC-060978

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

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

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Jacobs Federal

2. NAME OF OPERATOR: Socony Mobil Oil Company, Inc.

9. WELL NO.: 6

3. ADDRESS OF OPERATOR: P. O. Box 1300, Hobbs, New Mexico 88240

10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 660' FSL & 660' FEL, Sec. 19, T-8S, R-35E
At top prod. interval reported below Same
At total depth Same

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 19-8S-35E

14. PERMIT NO.:
DATE ISSUED: 11-5-64

12. COUNTY OR PARISH: Roosevelt
13. STATE: N. Mex.

15. DATE SPUDDED: 11-20-64
16. DATE T.D. REACHED: 11-29-64
17. DATE COMPL. (Ready to prod.): 12-2-64
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 4224 DF
19. ELEV. CASINGHEAD:

20. TOTAL DEPTH, MD & TVD: 4800
21. PLUG, BACK T.D., MD & TVD: 4766
22. IF MULTIPLE COMPL., HOW MANY*:
23. INTERVALS DRILLED BY: →
ROTARY TOOLS: 0-4800
CABLE TOOLS: -

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4658-4738

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Laterolog 2400-4786 - Acoustic GR 368-4786

27. WAS WELL CORED: Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	24	367	12-1/4	Cem w/350 sx IncorNeat	
4-1/2	9.5	4800	7-7/8	Cem w/1760 sx Incor Neat	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)
4658-4738 - 18 - 1" Jet Holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4658-4738	1000 Gals 15% NE Acid

33.* PRODUCTION

DATE FIRST PRODUCTION: 12-2-64
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Flowing
WELL STATUS (Producing or shut-in): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
12-2-64	24	20/64"	→	172	430	0	250

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
100	---	→	172	430	0	27.9

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

TEST WITNESSED BY: W. A. Mosley

35. LIST OF ATTACHMENTS

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

SIGNED J. J. McDaniel TITLE Group Supervisor DATE 12/3/64

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

OPERATOR'S COPY

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☐ other water injector
2. NAME OF OPERATOR: Fina Oil and Chemical Company
3. ADDRESS OF OPERATOR: P. O. Box 2990 Midland, TX 79702
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650 FNL, 924 FEl, Unit H, Sec. 30
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE: NM 0145685
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Horton Federal
9. WELL NO.: 11
10. FIELD OR WILDCAT NAME: Milnesand San Andres
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 30 - 8S - 35E, NMPM
12. COUNTY OR PARISH: Roosevelt
13. STATE: NM
14. API NO.:
15. ELEVATIONS (SHOW DF, KDB, AND WD): 4224 KDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☒
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)*

7/26/85 Set cement retainer in 4-1/2" casing @ 4170'. Pumped a total of 50 sx (11 bbls) Class "C" w/3% CaCl2 under retainer leaving 35' equivalent on top of retainer. Set CIBP @ 2380'. Pumped 80 sx (19 bbls) Class "C" w/3% CaCl2 leaving cement from 2372' to 2100' inside and outside 4-1/2" casing. Perforated 4-1/2" casing w/2 jet shots @ 470'. Pumped 235 sx (55 bbls) Class "C" neat leaving cement from 470' to surface inside and outside 4-1/2" casing. 4-1/2" casing stub 4' in length was cemented over the well and a steel plate was welded on top of the stub.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED [signature] TITLE Pet. Engr. III DATE 2-19-86

(This space for Federal or State office use)

APPROVED BY APPROVED PETER W. CHESTER TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: FEB 28 1986 Peter W. Chester BUREAU OF LAND MANAGEMENT

SUBJECT TO LIKE APPROVAL BY STATE

See Instructions on Reverse Side

AMERICAN PETROFINA COMPANY OF TEXAS

ENGINEERING CHART

Horton Federal Unit #11

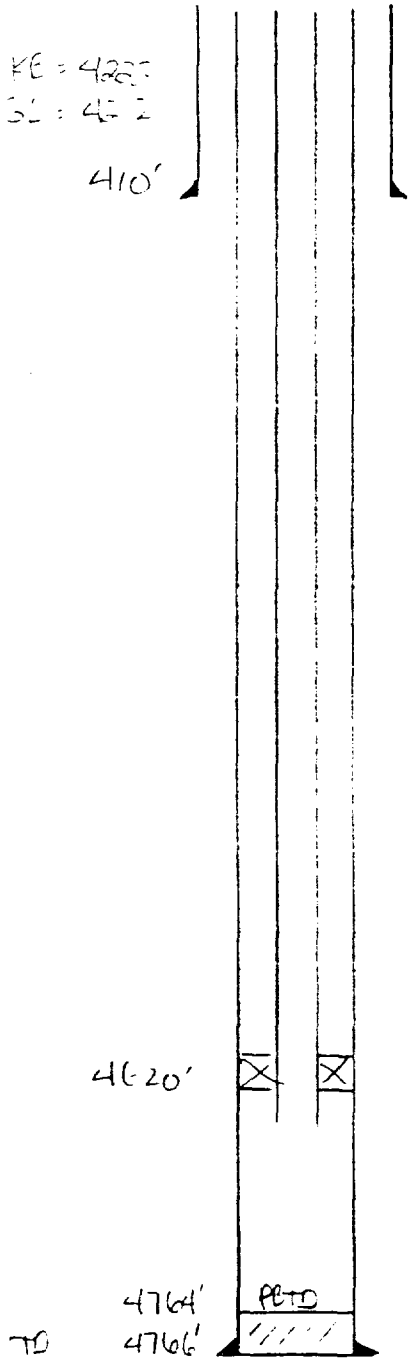
Roosevelt County, New Mexico

SHEET NO. _____ OF _____

FILE _____

DATE 7-24-84

BY Jon David Carroll



WELL TYPE: Injection

8 5/8" 24# J-55 csg @ 410' (12 1/4" hole) w/ 250 sx cmt (circulated)

Tubing:

~4595' 2 3/8" OD fiberglass tbg.

Packer:

Baker Lock Set Tension 2 3/8" x 4 1/2" x 3' set @ 4620' w/ 5000#

4 1/2" 9.5# J-55 csg @ 4766' (7 7/8" hole) w/ 250 sx cmt.

Perfs (2 spf):

Zone A: 4664-4700'
Zone B: 4718-38'

Stimulation (11-28-79):

Acidized well w/ 4000 gal NEFE HCL acid

FINA-2069

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM 145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: USA Russell E. Horton

9. WELL NO.: 5

10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30-8-35 NMPM

12. COUNTY OR PARISH: Roosevelt

13. STATE: New Mexico

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

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

2. NAME OF OPERATOR: Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR: Box 68 - Hobbs, New Mexico 88240

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

At surface: 1650' FNL x 2243.8 FEL Sec. 30 (Unit G SW/4 NE/4)

At top prod. interval reported below

At total depth

14. PERMIT NO. | DATE ISSUED

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
5-28-64	6-7-64	6-22-64	4226' RDB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4686'	4685' PBD		→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4656'-74' San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Sonic Log-Gamma Ray

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	423'	11"	200 Sx. circ	
4-1/2"	9.5#	4686'	7-7/8"	200 Sx	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	4625	None

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

4656'-74' W/2 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4656'-74'	500 gal acid, 20,000 gal oil; 13,000# sand, 2,000# glass beads.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
6-22-64	Pumping	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
6-23-64	24	pmp	→	98	56	4 BAW	575

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→				30°

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

TEST WITNESSED BY: J. W. Terry

35. LIST OF ATTACHMENTS

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

SIGNED: Original Signed by V. E. STALEY TITLE: Area Superintendent DATE: July 1, 1964

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

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37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	4656	4674	Oil x gas productive interval

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Anhydrite		2195
San Andres		3902

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683836

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR: Box 68 - Hobbs, New Mexico 88240

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 330' FNL X 2241.3' FEL, Sec. 30 (Unit B, NW/4 NE/4)
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: USA Russell E. Horton

9. WELL NO.: 7

10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30-8-35 NMPM

12. COUNTY OR PARISH: Roosevelt

13. STATE: New Mexico

14. PERMIT NO.: | DATE ISSUED:

15. DATE SPUDDED: 6-19-64
16. DATE T.D. REACHED: 6-28-64
17. DATE COMPL. (*Ready to prod.*): 7-6-64
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 4227' RDB
19. ELEV. CASINGHEAD:

20. TOTAL DEPTH, MD & TVD: 4696'
21. PLUG, BACK T.D., MD & TVD: 4693'
22. IF MULTIPLE COMPL., HOW MANY*:
23. INTERVALS DRILLED BY: → ROTARY TOOLS: 0-TD | CABLE TOOLS:

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4674'-88' San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Acoustic-Gamma Ray Log

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	412'	12-1/4	225 sx Circ	
4-1/2"	9.5#	4696'	7-7/8	200 sx	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	4693'	None

31. PERFORATION RECORD (*Interval, size and number*)
4674'-4688' W/2 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4674-88'	500 gal acid
	20,000 gal oil
	20,000 # sn
	4,000 # beads

33.* PRODUCTION

DATE FIRST PRODUCTION: 7-8-64
PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*): Flowing
WELL STATUS (*Producing or shut-in*): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7-9-64	5	18/64	→	58	107	0	1850

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
700	400	→	278	514	0	30°

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

TEST WITNESSED BY: J. W. Terry

35. LIST OF ATTACHMENTS: None

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

SIGNED: Original Signed by: V. R. STALEY TITLE: Area Superintendent DATE: 7-10-64

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

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FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	4674	4688	Oil X gas producing interval.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Anhydrite		2194
San Andres		3892

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR
Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR
Box 68 - Hobbs, New Mexico - 88240

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 2310" FSL X 2246.3" FEL Sec. 30 (Unit J NW/4 SE/4)
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.
NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
USA Russell E. Horton

9. WELL NO.
9

10. FIELD AND POOL, OR WILDCAT
Milnesand San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
30-8-35 NMPM

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Roosevelt | 13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7-10-64	7-21-64	8-3-64	4224' RDE	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4851'	4811'		→	0-td	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
4724'-47' San Andres

25. WAS DIRECTIONAL SURVEY MADE
No

26. TYPE ELECTRIC AND OTHER LOGS RUN
Lane-Wells Acoustilog, Focused Log

27. WAS WELL CORED
Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	404	12-1/4	250 sx circ	
4-1/2"	9.5#	4851	7-7/8	200	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	4750'	

31. PERFORATION RECORD (*Interval, size and number*)
4724-47' W/2 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4724-47	2000 gal acid
	20,000 gal oil, 28,000# sand
	4,000# beads

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
7-25-64	Flow	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8-3-64	24	20/64	→	165	90	0	548

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
120	0	→				30°

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

TEST WITNESSED BY
M. R. Frazier

35. LIST OF ATTACHMENTS
None

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

SIGNED Original Signed by: V. E. STALEY TITLE Area Superintendent DATE 8/6/64

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

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37. SUMMARY OF POROUS ZONES:
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FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR
Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR
Box 68 - Hobbs, New Mexico 88240

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface
330' FNL x 921.3' FEL, Sec. 30 (Unit A, NE/4 NE/4)
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.
NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
USA Russell E. Horton

9. WELL NO.
10

10. FIELD AND POOL, OR WILDCAT
Milnesand San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
30-8-35 NMPM

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Roosevelt
13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7-23-64	8-2-64	8-10-64	4224' RDB	--

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4766'	4764'	--	→	0-TD	--

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
4718'-4741' - San Andres

25. WAS DIRECTIONAL SURVEY MADE
No

26. TYPE ELECTRIC AND OTHER LOGS RUN
Gamma Ray-Neutron Collar Log

27. WAS WELL CORED
No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24#	405	12-1/4"	250 sx - Circ.	
4-1/2"	9.5#	4764	7-7/8"	250 sx - Top 3700'	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2"	4744	

31. PERFORATION RECORD (*Interval, size and number*)
4718'-4741' w/2 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4718'-41'	750 gal. acid

33.* PRODUCTION

DATE FIRST PRODUCTION: 8-10-64
PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*): Flowing
WELL STATUS (*Producing or shut-in*): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8-11-64	24	16/64	→	79	87	17 BLW	11

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
270	300	→				30 Degree

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

TEST WITNESSED BY
M. R. Frazier

35. LIST OF ATTACHMENTS

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

SIGNED [illegible] TITLE Area Superintendent DATE August 18, 1964

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FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	4718	4741	Oil and gas producing zone.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Anhydrite		2200
San Andres		3922

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR: Box 68 - Hobbs, New Mexico

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 990' FSL X 928.75 FEL Sec. 30 (Unit P, SE/4 SE/4)
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: LC 0145685
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: USA Russell E. Horton
9. WELL NO.: 15
10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30-8-35 NMPM
12. COUNTY OR PARISH: Roosevelt
13. STATE: New Mexico

14. PERMIT NO.: DATE ISSUED:

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
8-23-64	9-3-64	9-11-64	4221' RDB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
5396'	5270'		→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4691'-4714' - San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Lane Wells, Acoustilog, Focused Log

27. WAS WELL CORED: Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	2202	11"	700 Sx.	
4-1/2"	9.5#	5396	7-7/8"	450 Sx.	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	4695	

31. PERFORATION RECORD (*Interval, size and number*)
5320-40 W/2 SPF
5304-14 W/2 SPF
4691-4714 W/2 SPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5320-40	1000 gal acid
5304-14	6000 gal acid-BP at 5250'
4691-4714	1000 gal acid

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
9-11-64	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9-11-64	24	18/64	→	103	100	0	954

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
200		→				30

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Sold - Sinclair Oil & Gas Co.

TEST WITNESSED BY: M. R. Frazier

35. LIST OF ATTACHMENTS: None

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

SIGNED: Original Signed by: V. E. STALEY TITLE: Area Superintendent DATE: Sept. 15, 1964

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

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Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	4691	4714	Oil and gas producing zone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Anhydrite		2221
San Andres		3921

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: USA Russell E. Horton

9. WELL NO.: 17

10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30-8-35 NMPM

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

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

2. NAME OF OPERATOR: Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR: Box 68 - Hobbs, New Mexico - 88240

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 2310' FSL X 928.75' FWL, Sec. 30 (Unit I, NE/4 SE/4)
At top prod. interval reported below
At total depth

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Roosevelt | 13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
9-7-64	9-17-64	9-21-64	4222' RDB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4774'	4772' PBD		→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4723'-46' San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Lane Wells-Acoustilog

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24	405	11"	250 Sx. Circ.	
4-1/2"	9.5	4774	7-7/8"	250 Sx	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2"	4766'	

31. PERFORATION RECORD (*Interval, size and number*)
4723'-46' W/2 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4723-46'	750 gal acid

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
9-21-64	Swabb & Flow	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9-21-64	9	Open	→	38	NA	22	NA

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

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): Sold - Sinclair Oil & Gas Co.

TEST WITNESSED BY: M. R. Frazier

35. LIST OF ATTACHMENTS

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

SIGNED: Original Signed by: V. E. STALEY TITLE: Area Superintendent DATE: 9/25/64

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	4723	4746	Oil & Gas producing zone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Anhydrite		[redacted] 2202
San Andres		3910

U.S. GOVERNMENT PRINTING OFFICE: 1963—O—683636

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR: Box 68 - Hobbs, New Mexico - 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 1650.5' FNL X 330' FWL, Sec. 29 (Unit E, SW/4 NW/4)
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: USA Russell E. Horton
9. WELL NO.: 18
10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 29-8-35 NMPM
12. COUNTY OR PARISH: Roosevelt
13. STATE: New Mexico
14. PERMIT NO.: DATE ISSUED:

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
9-19-64	9-28-64	10-1-64	4217' RDB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4770'	4768'		→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4718'-34' San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Lane Wells-Folusedlog, Acoustilog

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	395	12-1/4"	250 Sx.	
4-1/2"	9.5#	4770	7-7/8"	250 Sx.	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	4745'	

31. PERFORATION RECORD (Interval, size and number)
4718-34' W/2 SPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4718-34	750 gal acid

33.* PRODUCTION

DATE FIRST PRODUCTION: 10-1-64
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Swab
WELL STATUS (Producing or shut-in):

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-2-64	9	Swab	→	80	NA	40	NA

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→	213	NA	106	29°

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Sold - Sinclair Oil & Gas Co.
TEST WITNESSED BY: M. R. Frazier

35. LIST OF ATTACHMENTS: None

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

SIGNED Original Signed by: V. A. STALEY TITLE Area Superintendent DATE 10-7-64

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

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SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	4718	4734	Oil & Gas Producing Zone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Anhydrite		2199
San Andres		3910

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: USA Russell E. Horton

9. WELL NO.: 20

10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 29-8-35 NMPM

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

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

2. NAME OF OPERATOR: Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR: Box 68 - Hobbs, New Mexico - 88240

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

At surface: 330' FNL X 330' FWL, Sec. 29 (Unit D, NW/4 NW/4)

At top prod. interval reported below

At total depth

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Roosevelt

13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
9-27-64	10-6-64	10-8-64	4219' RDB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4764	4763		→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4661'-4692' - San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: PGAC's Acoustic-GammaRay Log

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	403'	12-1/4"	250 sx. circ.	
4-1/2"	9.5#	4764'	7-7/8"	250 sx.	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	4707	

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

4661, 4668, 4675, 4684, 4692 W/2 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4661-92'	1000 gal acid

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
10-8-64	flowing	producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-8-64	6	20/64	→	40	25	0	620

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
250	0	→	160	100	0	28

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

TEST WITNESSED BY: M. R. Frazier

35. LIST OF ATTACHMENTS: None

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

SIGNED _____ TITLE Area Superintendent DATE 10/9/64

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

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37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	4661	4692	Oil & Gas Producing Zone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Anhydrite		2200
San Andres		3930

U.S. GOVERNMENT PRINTING OFFICE: 1969—O-683636

Form 9-331
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: USA Russell K. Horton

9. WELL NO.: 21

10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 29-8-35 NMPM

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

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

2. NAME OF OPERATOR: Pan American Petroleum Corporation

3. ADDRESS OF OPERATOR: Box 68 - Hobbs, New Mexico - 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 2310' FSL x 330' FWL, Sec. 29, (Unit L, NW/4 SW/4)
At top prod. interval reported below
At total depth

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Roosevelt | 13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
10/6/64	10/14/64	10/22/64	4219' RDB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4775'	4720'		→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4692'-4708' San Andres

25. WAS DIRECTIONAL SURVEY MADE:

26. TYPE ELECTRIC AND OTHER LOGS RUN: Acoustic-Gamma Ray Log

27. WAS WELL CORED:

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	418'	12-1/4"	250 sx. circ.	
4-1/2"	9.4#	4775'	7-7/8"	250 sx.	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	4712'	

31. PERFORATION RECORD (Interval, size and number)
4692', 4697', 4701', 4705', 4709' W/2 JS each interval.
4732'-52' W/2 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4692'-4708'	750 gal acid.
4732'-52'	750 gal acid. Squeezed

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
10-22-64	Swab	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10/23/64	9	swab	→	45	NA	119	NA

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→	120		317	27°

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Sold - Sinclair Oil & Gas Co.

TEST WITNESSED BY: M. R. Frazier

35. LIST OF ATTACHMENTS: None

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

SIGNED: Signed by V. A. STALEY TITLE: Area Superintendent DATE: 10-26-64

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

21

Prod Zone

2213

3915

ILLEGIBLE

AMERICAN PETROFINA COMPANY OF TEXAS

ENGINEERING CHART

Horton Federal Unit # 25

Roosevelt County, New Mexico

SHEET NO ____ OF ____

FILE ____

DATE 7-25-94

BY JON CAMIL CARIN

KB = 4219'
GL = 4208'

401'

WELL TYPE: Injection

8 7/8" 24# J-55 csg @ 401' (12 1/4" hole)
w/225 sx cmt (circulated)

Tubing:

4629' (150 jts) 2 3/8" 4.7# J-55 EUE 8RD

Packer:

Guiberson Uni I 2 3/8" X 4 1/2" X 3'
set @ 4642' w/ 12 pts tension

4642'

4 1/2" 9.5# J-55 csg @ 4716' (7 7/8" hole)
w/ 250 sx cmt

4716'

open hole (3 7/8" bit) 4716-4755'

TD 4755'

Perfs (2 spf):

ZONE A: 4687-4705'
open hole: 4716-55'

Stimulation (4-9-80):

Acidized w/ 4000 gal
15% NEFE HCL (2 stages)
sep. by 300# rx salt in 300
gal gelled brine

FINA - 2009

OPERATOR'S COPY

Form 3160-4
(November 1983)
(formerly 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE (See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: Fina Oil and Chemical Company

3. ADDRESS OF OPERATOR: P. O. Box 2990 Midland, TX 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 285' FEL & 2305 FNL
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Horton Federal
9. WELL NO.: 32
10. FIELD AND POOL, OR WILDCAT: Milnesand-San Andres
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30, T-8-S, R-35-E NMPM
12. COUNTY OR PARISH: Roosevelt
13. STATE: NM
14. PERMIT NO.: DATE ISSUED:

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11-15-84	11-23-84	12-20-84	+4224.3 DF & +4225.3 KDB	+4214.6

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4775'MD	4730'		→	all	--

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
4652' - 4740' San Andres MD

25. WAS DIRECTIONAL SURVEY MADE: yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: Comp. acoustic vel. log, dual guard, comp. density & DS neutron

27. WAS WELL CORED: no

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24#	445'	12 1/4"	275 sx Cl "C" w/2% CACL	NA
5 1/2"	15.5#	4774'	7 7/8"	975 sx HLC w/salt & LCM	NA
				200 sx Cl "H" w/salt	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8"	4724'	NA

31. PERFORATION RECORD (Interval, size and number)

4717' - 4725' 9 shots
4664' - 4666' 3 shots
4668' - 4681' 14 shots

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4717'-4725'	250 gal 15% NEFE
4664'-4681'	250 gal 15% NEFE

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
12-27-84	pumping 2 1/2"x2"x20'	shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
4-17-86	24		→	0	0	930	NA

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

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

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

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

SIGNED [signature] TITLE Drilling Foreman DATE 1-22-87

ACCEPTED FOR RECORD
PETER W. CHESTER
JAN 30 1987
BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA
NEW MEXICO

JAN 27 1987

*(See Instructions and Spaces for Additional Data 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.

Form 9-330
(Rev. 5-63)

OPERATOR'S COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Horton Federal

9. WELL NO.: 33

10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30, T-8-S, R-35-E

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

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

2. NAME OF OPERATOR: AMERICAN PETROFINA CO. OF TEXAS

3. ADDRESS OF OPERATOR: Box 2990, Midland, TX 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2320 FNL, 1550 FEL
At top prod. interval reported below
At total depth

BUREAU OF LAND MANAGEMENT ROSWELL RESOURCE AREA FEB 8 1985 ROSWELL, NEW MEXICO

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Roosevelt | 13. STATE: NM

15. DATE SPUDDED: 11-23-84 | 16. DATE T.D. REACHED: 12-02-84 | 17. DATE COMPL. (Ready to prod.): 1-12-85 | 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: GR 4212.6, KDB 4224 | 19. ELEV. CASINGHEAD:

20. TOTAL DEPTH, MD & TVD: 4774 | 21. PLUG, BACK T.D., MD & TVD: 4750 | 22. IF MULTIPLE COMPL., HOW MANY*: - | 23. INTERVALS DRILLED BY: → | ROTARY TOOLS: 0-4774 | CABLE TOOLS:

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4665-70, 4680-85, 4718-28 San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-FDC-CNL, DLL, MSFL, NGT, BHC

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	24	446	12-1/4	275 sx, Cl. C	None
5-1/2	15.5	4773	7-7/8	1200 sx, Cl. H	None

29. LINER RECORD None

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8	4667	-

31. PERFORATION RECORD (Interval, size and number)
4665-70, 4680-85, .43" 12 shots
4718-28 .43" 9 shots

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4665-70, 4680-85	250 gal. 15% NEFE acid.
4718-28	250 gal. 15% NEFE acid.

33.* PRODUCTION

DATE FIRST PRODUCTION: 1-12-85 | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Pumping 2" tubing pump. | WELL STATUS (Producing or shut-in): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
1-28-85	24	-	→	37	1	497	27 to 1

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
-	-	→	37	1	497	27.1

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

TEST WITNESSED BY: Charles Tomblin

35. LIST OF ATTACHMENTS: Electric Logs

ACCEPTED FOR RECORD
PETER W. CHESTER
FEB 12 1985
BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA

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

SIGNED Roger E. Smelley R. E. Smelley TITLE Production Superintendent DATE 1-31-85

nh

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

W.F

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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	GAS	
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PRORATION OFFICE		

FEB 1984 RECEIVED PROD. DEPT. HOBBS DIST.

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 8750

Form C-104
Revised 10-01-78
Format 06-01-83
Page 1

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: Amoco Production Company

Address: P. O. Box 68, Hobbs, NM 88240

Approval to flare casinghead gas from this well must be obtained from the Minerals Management Service.

Reason(s) for filing (Check proper box)

- [X] New Well
- [ ] Recompletion
- [ ] Change in Ownership

Change in Transporter of:

- [ ] Oil
- [ ] Dry Gas
- [ ] Casinghead Gas
- [ ] Condensate

Other (Please explain): Request allowable to produce

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease No.
Horton Federal	34	Milnesand San Andres	Federal	NM0145685

Location

Unit Letter I : 2280 Feet From The South Line and 865 Feet From The East

Line of Section 30 Township 8-S Range 35-E , NMPM, Roosevelt County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [XX] or Condensate [ ]	Address (Give address to which approved copy of this form is to be sent)
Mobil Pipeline Company	Box 900, Dallas, TX
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [ ]	Address (Give address to which approved copy of this form is to be sent)

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	I	30	8-S	35-E	No	

If this production is commingled with that from any other lease or pool, give commingling order number: _____

NOTE: *Complete Parts IV and V on reverse side if necessary.*

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

Cathy L. Forman
(Signature)

Asst. Admin. Analyst
(Title)

2-10-84
(Date)

OIL CONSERVATION DIVISION

APPROVED FEB 13 1984, 19 _____

BY ~~ORIGINAL SIGNED BY JERRY SEXTON~~

TITLE DISTRICT I SUPERVISOR

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

0+5-NMOCD,H 1-R.E.Ogden,Hou 1-F.J.Nash,Hou
1-CLF

Form C-104
Revised 10-01-78
Format 06-01-83
Page 2

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
	X		X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
12-15-83	1-30-84	4800'	4775'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
4211.8' GL	Milnesand San Andres	4670'	4751'
Perforations			**Depth Casing Shoe**
4670'-4706' & 4720'-4748' w/4 JSPF			4800'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12-1/4"	8-5/8"	400'	250 Cl C w/2% CaCl2
7-7/8"	5-1/2"	4800'	1350 Cl C w/add & 475 Cl C neat
	2-7/8"	4751'	

V. TEST DATA AND REQUEST FOR ALLOWABLE *(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)*

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
1-13-84	1-30-84	Pump	
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
24 hours		28 psi	
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**
62 BO, 475 BW, 15 MCFD	62	475	15

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method *(pitot, back pr.)*	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**

RECEIVED
FEB 10 1984
O.C.D.
HOBBS OFFICE

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

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

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Horton Federal

2. NAME OF OPERATOR: AMERICAN PETROFINA CO. OF TEXAS

9. WELL NO.: 35

3. ADDRESS OF OPERATOR: Box 2990, Midland, TX 79702

10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 990 FNL, 2270 FWL, Sec. 30
At top prod. interval reported below
At total depth

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30, T-8-S, R-35-E, NMPM

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Roosevelt | 13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
10-15-84	10-22-84	2-6-85	4228.8 DF, 4230 KB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4810	4786		→	0-4810	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4652-4745 San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: LDT-CNL-NGT-DLL, BHC, EPT

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	24	446	12-1/4	300 sx. Cl.C	-
5-1/2	15.5	4809	7-7/8	1350 sx. HLC, 200 sx.Cl.C	-

29. LINER RECORD: None

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8	4697	

31. PERFORATION RECORD (Interval, size and number): 4652-4745 : 22 shots

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4652-4745	3160 gal. 20% NEFE

ACCEPTED FOR RECORD
PETER W. CHESTER
APR 10 1985
BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut in)
2-14-85	Pumping - 2" Insert	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
2-27-85	24	2"	→	17	(1	245	-

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
-	-	→	17	(1	245	27.1

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

TEST WITNESSED BY: Curtis Allen

35. LIST OF ATTACHMENTS: 2 log copies Neutron log, 2 deviation surveys.

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

SIGNED J. C. Chapman TITLE Assistant Dist. Mgr. of Prod. DATE 3-01-85

nh

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

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Horton Federal

9. WELL NO.: 36

10. FIELD AND POOL, OR WILDCAT: Milnesand-San Andres

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30, T-8-S, R-35-E NMPM

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

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

2. NAME OF OPERATOR: American Petrofina Co. of Texas

3. ADDRESS OF OPERATOR: P.O. Box 2990 Midland, Texas 79702

DEC 2 4 1984

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 990 FNL, 1581 FEL
At top prod. interval reported below
At total depth

14. PERMIT NO.: -
DATE ISSUED: 9/26/84

12. COUNTY OR PARISH: Roosevelt
13. STATE: New Mexico

15. DATE SPUDDED: 10/24/84
16. DATE T.D. REACHED: 11-2-84
17. DATE COMPL. (Ready to prod.): 11-20-84
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 4229 DF 4230 KDB
19. ELEV. CASINGHEAD:

20. TOTAL DEPTH, MD & TVD: ~~4806~~ ~~4790~~ 4790
21. PLUG BACK T.D., MD & TVD: 4754
22. IF MULTIPLE COMPL., HOW MANY*:
23. INTERVALS DRILLED BY: →
ROTARY TOOLS: X
CABLE TOOLS:

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
4655-4688
4712-4732 San Andres

25. WAS DIRECTIONAL SURVEY MADE: NO

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR DEN.-CNL Sonic

27. WAS WELL CORED: NO

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	24	442	12 1/4	275 sx Cl "C"	-
5 1/2	15.5	4806	7 7/8	1175 sx HLC & 200 SX Cl H	-

29. LINER RECORD None

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8	4745	-

31. PERFORATION RECORD (Interval, size and number)

4655-4688 .36 20 shots
4712-4732 .36 ~~10 shots~~

ACCEPTED FOR RECORD
PETER W. CHESTER
JAN 18 1985

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4655-4688	3000 gals. 15% NEFE acid
4712-4732	2080 gals. 15% NEFE acid

33.* PRODUCTION

DATE FIRST PRODUCTION: 11-20-84
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Pump 2" Insert
WELL STATUS (Producing or shut-in): Production

DATE OF TEST	HOURS TESTED	CHOKE SIZE	*PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
12-20-84	24	2"	→		TSTM	244	-

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
-	-	→	27.5	TSTM	244	26.4

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

TEST WITNESSED BY: Curtis Allen

35. LIST OF ATTACHMENTS: Density-Neutron Logs, Inclination Survey

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

SIGNED _____ TITLE _____ DATE _____

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

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

2. NAME OF OPERATOR: AMERICAN PETROFINA CO. OF TEX.

3. ADDRESS OF OPERATOR: Box 2990, Midland, TX 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 990 FNL, 295 FEL
At top prod. interval reported below
At total depth

MAR 8 1985

5. LEASE DESIGNATION AND SERIAL NO.: NM 0145685
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Horton Federal
9. WELL NO.: 37
10. FIELD AND POOL, OR WILDCAT: Milnesand San Andres
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 30, T-8-S, R-35-E, NMPM
12. COUNTY OR PARISH: Roosevelt
13. STATE: New Mexico
14. PERMIT NO.: DATE ISSUED:

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11-3-84	11-12-84	2-26-85	4218 DF, 4219 KDB	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
4791	4789		→	0-4791	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 4505-4525, 4662-4680 San Andres

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-FDC-CNL, NGT, DLL

27. WAS WELL CORED: Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	24	446	12-1/4	275 sx. Cl. C	-
5-1/2	15.5	4790	7-7/8	950 sx. HLC, 200 sx.Cl.H	-

29. LINER RECORD: None

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8	4746	-

31. PERFORATION RECORD (Interval, size and number)
4505-4525, 18 shots
4662-4680, 10 shots

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4505-4518	1500 gal. 15% NEFE
4662-4680	2000 gal. 15% NEFE

ACCEPTED FOR RECORD
PETER W. CHESTER
APR 10 1985
BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
12-8-84	Pumping, 2" Insert	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
2-27-84	24	2"	→	30	(1	519	-

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
-	-	→	30	(1	519	27.1

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

TEST WITNESSED BY: Curtis Allen

35. LIST OF ATTACHMENTS: 2 Neutron-density logs, 2 deviation surveys

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

SIGNED J. C. Chapman TITLE Assistant Dist. Mgr. of Prod. DATE 3-1-85
J. C. Chapman

nh

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

Item VII.

1. Proposed Average daily rate: 425 barrels
   Proposed Maximum daily rate: 500 barrels

2. System is Closed.

3. Proposed Average Pressure: 775 psi
   Proposed Maximum Pressure: 800 psi

4. Reinjected Produced Water.

5. Injection is into Zone Productive of Oil and Gas.

Item VIII.

Injection Zone

Geological Name: San Andres Dolomite

Thickness & Depth: 4716-4740'

Underground Sources of Drinking Water Overlying the Proposed Injection Zone

Fresh Water Aquifer: Ogallala above 400' measured depth.

UNICHEM
INTERNATIONAL

Home Office 707 N. Leech, P.O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

September 29, 1988

Mr. Slim Jordan
Fina Oil & Chemical Company
2400 North Grimes, Suite H-186
Hobbs, New Mexico 88240

Dear Mr. Jordan:

Enclosed please find our water analysis reports on the samples submitted to our laboratory on September 28, 1988.

If you have any questions or require further information, please contact us

Sincerely,

Sharon Wright
Laboratory Technician

SW/djs

Enclosures

cc: John Offutt
Curtis Allen
Dee Lawrence
Joe Hay
Skeet Raybon

Item XI.

Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : FINA OIL AND CHEMICAL COMPANY
Date : 09-28-1988
Location: - EAST (on 09-28-1988)

	Sample 1
Specific Gravity:	1.001
Total Dissolved Solids:	1143
pH:	6.96
IONIC STRENGTH:	0.030

CATIONS:		me/liter	mg/liter
Calcium	(Ca^{+2})	8.00	160
Magnesium	(Mg^{+2})	7.60	92.3
Sodium	(Na^{+1})	3.05	70.2
ANIONS:			
Bicarbonate	(HCO_3^{-1})	2.80	171
Carbonate	(CO_3^{-2})	0	0
Hydroxide	(OH^{-1})	0	0
Sulfate	(SO_4^{-2})	6.92	333
Chloride	(Cl^{-1})	8.93	317

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	-0.19	-13

Unichem International

707 North Leech P.O.Box 1499

Hobbs, New Mexico 88240

Company : FINA OIL AND CHEMICAL COMPANY
Date : 09-28-1988
Location: - WEST (on 09-28-1988)

	Sample 1
Specific Gravity:	1.001
Total Dissolved Solids:	1887
pH:	6.77
IONIC STRENGTH:	0.052

CATIONS:		me/liter	mg/liter
Calcium	(Ca^{+2})	18.4	368
Magnesium	(Mg^{+2})	13.6	165
Sodium	(Na^{+1})	0.958	22.0
ANIONS:			
Bicarbonate	(HCO_3^{-1})	3.00	183
Carbonate	(CO_3^{-2})	0	0
Hydroxide	(OH^{-1})	0	0
Sulfate	(SO_4^{-2})	6.92	333
Chloride	(Cl^{-1})	23.0	817

SCALING INDEX (positive value indicates scale)

Temperature		Calcium Carbonate	Calcium Sulfate
86°F	30°C	-0.08	-8.1

Item XII.

We find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water. We have examined available geologic and engineering data.

Neva Herndon

Neva Herndon
Senior Production Clerk

October 26, 1988

LEGAL NOTICE
NOTICE OF APPLICATION FOR FLUID INJECTION WELL PERMIT

Name: FINA OIL & CHEMICAL COMPANY
Box 2990
Midland, TX 79702-2990
915 688-0600
Contact Party: Ronald E. Smelley, Dist. Prod. Mgr.
Purpose: Injection of Produced Salt Water

Horton Federal No. 38, 1700' from the North line & 920' from the East line, Sec. 30, T-8-S, R-35-E, NMPM

Formation: San Andres 3907' (+318); expected maximum injection rate - 500 bbl. per day, maximum pressure - 800 psi.

Interested parties must file objections or requestions for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

Published in the Portales News-Tribune October 2, 4, 1988. Legal #0469.

Affidavit of Publication

I, Marshall Stinnett
Business Manager of

THE PORTALES NEWS-TRIBUNE

a newspaper of general paid circulation and entered under second class postal privilege in Roosevelt County, published daily, (except Saturday) at Portales, New Mexico, for the fifty-two (52) consecutive weeks preceding this date, do solemnly swear that a copy of the above notice, as per clipping attached, was published weekly in the regular and entire issue of said newspaper, and not in any supplement thereof for 2 consecutive weeks commencing with the issue dated October 2 19 88

and ending with the issue dated October 4 19 88

All publication costs having been paid.

Marshall Stinnett

Subscribed and sworn to before me this 4th day of October 19 88

Le Mans Barnett
Notary Public

My commission expires 3/7/91 19

PROOF OF PUBLICATION

STATE OF NEW MEXICO

COUNTY OF Roosevelt

Before me, the undersigned authority, on this day personally appeared Marshall Stinnett (Name), the Business Manager (Title) of the Portales News-Tribune (Name of Newspaper), a newspaper having general circulation in Roosevelt County, New Mexico, who being by me duly sworn, deposes and says that the foregoing attached notice was published in said newspaper on the following date, to wit: October 2,4,1988

Marshall Stinnett

Subscribed and sworn to before me this the 6th day of October, 19 88, to certify which witness my hand and seal of office.

Re Mae Barnett
Notary Public in and for
Roosevelt Co. County, New Mexico

Item XIII.

Surface Owner:

Vernon Rogers
4613 Bermuda
San Angelo, TX 76904

Leasehold Operator within ½ mile:

Union Texas Petroleum
4000 N. Big Spring St.
Midland, TX 79701

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

HOBBS DISTRICT OFFICE

11-2-87

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:
MC
DHC
NSL
NSP
SWD
WFX X
PMX

Gentlemen:

I have examined the application for the:

Tenn Oil + Chemical Horton Fed #38-H 30-8-35
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK J.S.

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed