

5-27-93

STATE COM J #6A

SAN JUAN OU

CURRENT COMPLETION

SURFACE CASING
10 3/4" @ 162'
125 SACKS CEMENT
TOC: CIRC.

KB: 6379'
GLE: 6366'

TUBING
1.66" @ 3204'

PICTURED CLIFFS
3172-3204'

PRODUCTION CASING
7", K-55, 23.0# @ 3443'
288 SACKS CEMENT
TOC: 1100' (TS)

SQUEEZE CEMENT
3799-5226' W/ 500 SACKS
5050-5051' W/ 150 SACKS
5194' W/ 150 SACKS

PACKER @ 4850'

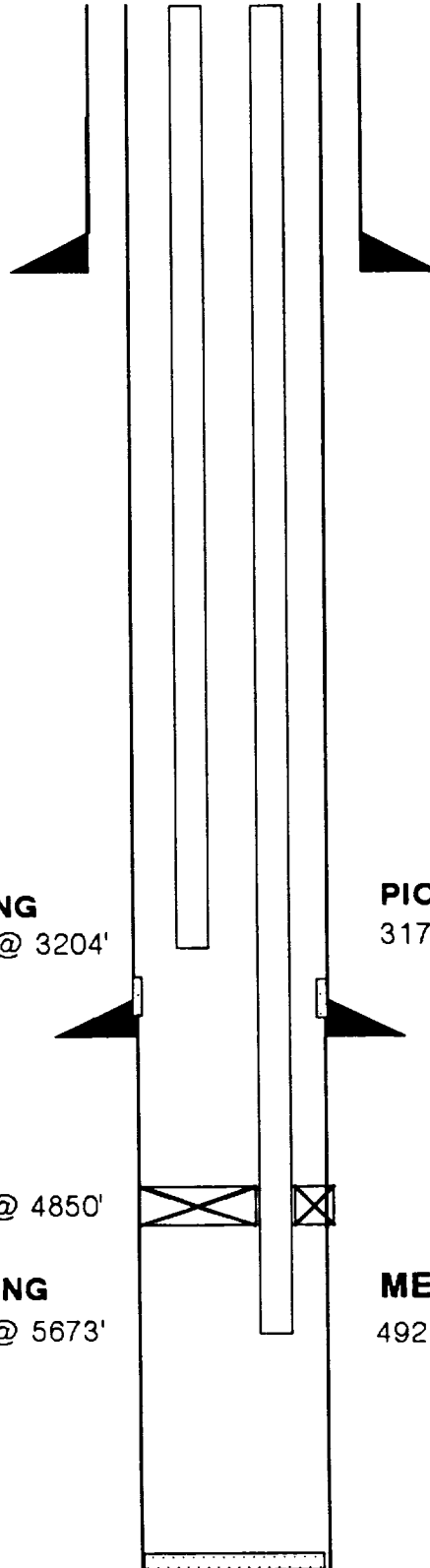
TUBING
1.9" @ 5673'

MESA VERDE
4928-5673'

LINER
4 1/2", CW-55, 10.5#
FROM 3240-5700'
245 SACKS CEMENT
TOC: 3847' (TS)

PBTD: 5694'

TD: 5707'



Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088
APR 8 1993

Form C-105
Revised 1-1-89

WELL API NO. 30-045-21634

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
B 10938

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER _____
b. Type of Completion:
NEW WELL ☐ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☒ OTHER _____ DUAL W/ MV

7. Lease Name or Unit Agreement Name
STATE COM J

2. Name of Operator
CONOCO. INC

8. Well No. 6A

3. Address of Operator
10 DESTA DR. STE 100W, MIDLAND, TX. 79705

9. Pool name or Wildcat
PICTURED CLIFFS

4. Well Location
Unit Letter 0 : 850 Feet From The SOUTH Line and 1680 Feet From The EAST Line
Section 36 Township 31 N Range 9 W NMPM SAN JUAN County

10. Date Spudded 3-4-75
11. Date T.D. Reached 3-21-75
12. Date Compl. (Ready to Prod.) 4-3-93
13. Elevations (DF & RKB, RT, GR, etc.) GL 6366
14. Elev. Casinghead

15. Total Depth 5705
16. Plug Back T.D. 5694
17. If Multiple Compl. How Many Zones? 2
18. Intervals Drilled By Rotary Tools XX Cable Tools

19. Producing Interval(s), of this completion - Top, Bottom, Name
3172 - 3204 PICTURED CLIFFS; 4926 - 5673 MESAVERDE
20. Was Directional Survey Made YES

21. Type Electric and Other Logs Run
22. Was Well Cored NO

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

CASING SIZE	WEIGHT LB/FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4	32	162	13 3/4	125 SX	
7	23	3443	8 3/4	288 SX	

24. LINER RECORD				25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
4 1/2	3245	5700	245		1.9	5673
					1.66	3204

26. Perforation record (interval, size, and number)		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.	
SEE ATTACHED PAGE		DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

28. PRODUCTION							
Date First Production 4-2-93		Production Method (Flowing, gas lift, pumping - Size and type pump) FLOWING				Well Status (Prod. or Shut-in) PRODUCING	
Date of Test 4-3-93	Hours Tested 24	Choke Size 1/4"	Prod'n For Test Period	Oil - Bbl.	Gas - MCF 140	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF 140	Water - Bbl.	Oil Gravity - API - (Corr.)	

29. Disposition of Gas (Sold, used for fuel, vented, etc.) VENTED
Test Witnessed By

30. List Attachments

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature BILL R. KEATHLY Printed Name BILL R. KEATHLY Title SR. REGULATORY SPEC Date 4-5-93

LEASE NO: B 10938
LEASE NAME & WELL NO: STATE COM J WELL 6A
API #: 30-045-21634
COUNTY & STATE: SAN JUAN, NM
POOL NAME: PICTURED CLIFFS

LINE 26: ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL

AMOUNT AND KIND OF MATERIAL USED

3188-3204

FRAC W/ DUMMY PAD OF 9996 gal 20# LINEAR
GELL. PUMPED 12,000 gal CLEAN N2 FOAM
PAD W/ NO SAND. PUMPED 12,000 gal N2
FOAM W/ 51,300# 16/30 SAND. SCREEN OUT
W/ 70% SAND PUT AWAY.

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

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

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

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.	30-045-21634
5. Indicate Type of Lease	STATE ☒ FEE ☐
6. State Oil & Gas Lease No.	B 10938
7. Lease Name or Unit Agreement Name	STATE COM J
8. Well No.	6A
9. Pool name or Wildcat	PICTURED CLIFFS
10. Elevation (Show whether OF, RCL, RT, GR, etc.)	GL 6366

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 ☐ GAS WELL ☒ OTHER ☐	2. Name of Operator CONOCO INC
3. Address of Operator 10 Desta Drive STE 100W, Midland, TX 79705	4. Well Location Unit Letter 0 : 850 Feet From The SOUTH Line and 1680 Feet From The EAST Line Section 36 Township 31 N Range 9 W NMEPM SAN JUAN County

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ PULL OR ALTER CASING ☐ OTHER: <u>DIST. 2</u> ☐	SUBSEQUENT REPORT OF: REMEDIAL WORK ☐ ALTERING CASING ☐ COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐ CASING TEST AND CEMENT JOB ☐ OTHER: DUAL W/ MESAVERDE ☒

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.

12-23-92 MIRU. SET ANCHORS. CLEAR SNOW FROM LOCATION. KILL WELL W/ 35 bbl 2% KCL. RIH W/ 7" BIT & SCRAPER TAGGED TOP OF LINER @ 3239'. POOH. PUMP 25 bbl KCL TO CALM WELL. RIH W/ 4 1/2" BIT & SCRAPER, TAGGED FILL @ 5638'. POOH. RIH W/ 4 1/2" RBP SET @ 3350'. SPOT SAND ON RBP. TAGGED TOP OF SAND @ 3337'. POOH. RUN GR, CCL. GIH W/ 2 SPF PERF GUN, 120 PHASING, PERF FROM 3188 TO 3204. POOH. RIH W/ BAKER SAP TOOL W/ 24" ELEMENT & 50 STANDS 2 7/8" WORKSTRING TO 3070'. BREAKDOWN PERFS (16 SETS, 2 FT PER SET) W/ 2 bbls 15% HCL PER SET @ 1 BPM. RIH TAG TOP OF SAND @ 3337'. CLEAN OUT 13" OF SAND. LATCH ON RBP. POOH. RIH W/ BAKER MODEL 'D' PACKER SET @ 4850'. POOH. RIH W/ 1.9" J-55, 2.76# TBG TO 5673' (FOR MESAVERDE PROD.). 12-31-92 SHUT DOWN WORK ON PICTURED CLIFFS UNTILL WEATHER CLEARS. 3-31-93 RU WESTERN TO FRAC PC. FRAC PC FERFS 3172-3204. DUMMY PAD 9996 gal 20# LINEAR GEL AT 19 bpm, AVG PRESS 3180#. PUMPED 12,000 gal CLEAN N2 FOAM PAD W/ NO SAND. PUMPED 12,000 gal N2 FOAM W/ 51,300# 16/30 SAND, AVG RATE 19 bpm, AVG PRESS 3100#. 4-1-93 RDMO. WELL FLOWING. 4-3-93 WELL TESTED 140 MCF IN 24 HRS.

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

SIGNATURE Bill R. Keathly TITLE SR REGULATORY SPEC. DATE 4-5-93

TYPE OR PRINT NAME BILL R. KEATHLY TELEPHONE NO. 915-686-5424

(This space for State Use)

Original Signed by FRANK T. CHAVEZ TITLE SUPERVISOR DATE APR 8 1993

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

7/1/75 XC: D & M

M & M

Div Mgr.

Les Carnes

Form C-105

Revised 1-1-65

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NEW MEXICO OIL CONSERVATION COMMISSION

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease	
State ☒	Fee ☐
E-5317-E-453-8; E-453-9	
B-10938-31; E-5113-15;	

1a. TYPE OF WELL										7. Unit Agreement Name	
b. TYPE OF COMPLETION										8. Farm or Lease Name	
OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER ☐										State Com J	
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER ☐										9. Well No.	
2. Name of Operator										#6A	
Mesa Petroleum Co.										10. Field and Pool, or Wildcat	
3. Address of Operator										Blanco (Mesaverde)	
P. O. Box 2009 Amarillo, Texas 79105											
4. Location of Well											
UNIT LETTER 0 LOCATED 850 FEET FROM THE South										12. County	
East 36 TWP. 31N RGE. 9W										San Juan	
15. Date Spudded		16. Date T.D. Reached		17. Date Compl. (Ready to Prod.)		18. Elevation (DF, RKB, RT, GR, etc.)		19. Elev. Casinghead			
3/4/75		3/21/75		6/14/75		6366' GL		-----			
20. Total Depth		21. Plug Back T.D.		22. If Multiple Compl., How Many		23. Intervals Drilled By		Rotary Tools			
5705'		5694'						X			
24. Producing Interval(s), of this completion - Top, Bottom, Name									25. Was Directional Survey Made		
4926' - 5673' Mesaverde									Yes		
26. Type Electric and Other Logs Run									27. Was Well Cored		
IEL, FDL, I-GRL									No		
28. CASING RECORD (Report all strings set in well)											
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED	
10-3/4"		32		162'		13-3/4"		125 sxs			
7"		23		3443'		8-3/4"		288 sxs			
4-1/2"		10.5		5700'		6-1/8"		245 sxs			
2-3/8"		4.7		5680'							
29. LINER RECORD						30. TUBING RECORD					
SIZE		TOP		BOTTOM		SACKS CEMENT		SCREEN		PACKER SET	
4-1/2"		3245'		5700'		245					
31. Perforation Record (Interval, size and number)						32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.					
5488-92' (4); 5482-84' (2); 5476-78' (2); 5422-30' (8); 5404-06' (2); 5396-5400' (4); 5390-92' (2); 5160-5178' (18); 4928-36' (8); 4952-56' (4); 4980-84' (4); 4990-98' (8); 5006-14' (8); 5022-40' (18); 5551-52' (2); 5585-5588' (3); 5673' (1)						DEPTH INTERVAL					
5390'-5492' 60,000 gal w/45,000# 100 mesh						AMOUNT AND KIND MATERIAL USED					
5390'-5492' 60,000 gal w/45,000# 100 mesh						4928'-5040' 120,000 gal gel wtr.					
5390'-5492' 60,000 gal w/45,000# 100 mesh						90,000# mesh; 120,000# 20/40 sd					
5390'-5492' 60,000 gal w/45,000# 100 mesh						5160'-5178' 100,000 gal w/30,000 #100 mesh					
5390'-5492' 60,000 gal w/45,000# 100 mesh						20,000 gal w/40,000# 20/40 sd					
30,000 gal w/60,000# 20/40 sand						5673'-5551' 20,000 gal w/15,000# 100 mesh					
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)									
		10,000 gal w/20,400 sand shut-in)									
Date of Test		Hours Tested		Choke Size		Prod'n. For Test Period		Oil - Bbl.		Gas - MCF	
6/13/75		3 hrs.		3/4"				215			
Flow Tubing Press.		Casing Pressure		Calculated 24-Hour Rate		Oil - Bbl.		Gas - MCF		Water - Bbl.	
134		446				1723					
34. Disposition of Gas (Sold, used for fuel, vented, etc.)										Test Witnessed By	
Vented											
35. List of Attachments											
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.											
SIGNED <i>J. Farwell</i>				TITLE Operations Manager				DATE 6/19/75			

6/19 XC: 7-State 1-EPNG 1-Archer

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NEW MEXICO OIL CONSERVATION COMMISSION

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Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

APR 28 1975

Indicate Type of Lease
State ☒ Fee ☐

State Oil & Gas Lease No.

AMA, PROD.

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. OIL WELL ☐ GAS WELL ☒ OTHER ☐	7. Unit Agreement Name
2. Name of Operator Mesa Petroleum Co.	8. Farm or Lease Name State "Com" J
3. Address of Operator Box 2009 Amarillo, Texas 79105	9. Well No. #6A
4. Location of Well UNIT LETTER 0, 850 FEET FROM THE South LINE AND 1680 FEET FROM THE East LINE, SECTION 36 TOWNSHIP 31N RANGE 9W NMPM.	10. Field and Pool, or Wildcat Blanco (Mesaverde)
15. Elevation (Show whether DF, RT, GR, etc.)	12. County San Juan

16.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOB ☐	OTHER ☒ Production casing

17. 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.

Total Depth 5707'. Ran 62 jts of 4-1/2" liner. Set @ 5700'. Liner hanger set @ 3239.5'. Cemented w/245 sx. Plugged down @ 2:00 P. M. 3-21-75.



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

SIGNED R. J. Flaker R. J. Flaker TITLE Prod. Engr. DATE 4-18-75

APPROVED BY George C. Lewis SUPERVISOR DIST. 3 DATE APR 21 1975

CONDITIONS OF APPROVAL, IF ANY:

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OPERATOR	1

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

APR 23 1975

5a. Indicate Type of Lease	
State ☒	Fee ☐
5. 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. OIL WELL ☐ GAS WELL ☒ OTHER-		7. Unit Agreement Name
2. Name of Operator Mesa Petroleum Co.		8. Farm or Lease Name State "Com" J
3. Address of Operator Box 2009 Amarillo, Texas 79105		9. Well No. #6A
4. Location of Well UNIT LETTER 0 850 FEET FROM THE South LINE AND 1680 FEET FROM THE East LINE, SECTION 36 TOWNSHIP 31 N RANGE 9 W NMPM.		10. Field and Pool, or Wildcat Blanco (Mesaverde)
15. Elevation (Show whether DF, RT, GR, etc.)		12. County San Juan

16.

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

NOTICE OF INTENTION TO:

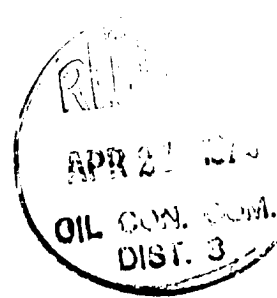
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐
PULL OR ALTER CASING ☐	OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐	ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOBS ☐	OTHER Intermediate casing ☒

17. 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.

Ran 7" casing & cemented @ 3443' K.B. w/288 sx cmt; plug down @ 8:00 P.M.
3-16-75. Ran temperature survey & indicated top cmt @ 1100'.



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

SIGNED R. J. Flaker R. J. Flaker TITLE Prod. Engr. DATE 4-18-75

APPROVED BY [Signature] TITLE SUPERVISOR DIST. #3 DATE APR 21 1975

CONDITIONS OF APPROVAL, IF ANY:

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OPERATOR	1

NEW MEXICO OIL CONSERVATION COMMISSION

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Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

APR 28 1975

AMA. PROD.

3a. Indicate Type of Lease	State ☒	Fee ☐
3. 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. OIL WELL ☐ GAS WELL ☒ OTHER-	7. Unit Agreement Name
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3. Address of Operator Box 2009 Amarillo, Texas 79105	9. Well No. #6A
4. Location of Well UNIT LETTER 0 850 FEET FROM THE South LINE AND 1680 FEET FROM THE East LINE, SECTION 36 TOWNSHIP 31N RANGE 9W NMPM.	10. Field and Pool, or Wildcat Blanco (Mesaverde)
15. Elevation (Show whether DF, RT, GR, etc.) 6366' GL	12. County San Juan

16.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	OTHER Surface casing ☐

17. 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.

Spudded A. M. 3-4-75. Ran 150' 10-3/4" csg set @ 162' KB. Cemented w/125 sxs "Class A", 2% CaCl, circ. 20 sxs. Plug down 4:00 P. M. 2-25-75.



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

SIGNED R. J. Flaker R. J. Flaker TITLE Prod. Engr. DATE 4-18-75

APPROVED BY [Signature] TITLE SUPERVISOR DIST. #3 DATE APR 21 1975

CONDITIONS OF APPROVAL, IF ANY:

XC Central Records - 1
Acctg. - 1
Div. Mgr. - 1
James Archer
Dr M-1
Mx M-1

WELL RECORD

Well Name and Operator Mesa - State Com J #6A

Location Sec. 36, T31N-R9W, San Juan County, New Mexico

Spud date 3/4/75 Elevation 6366' GL TD 5705'

PBTD 5694' Date TD Reached 3/21/75 Date Drlg. Rig Moved off 3/25/75

Date Comp Unit Moved On 5-8-75 Date Comp Unit Moved Off 6-6-75

W. I. Owners Mesa - 87.5%
EPNG - 12.5%

Contractor Pedco Prospect Archuleta

Type Well Gas OP No. 10-726-A3 Prod Form Mesaverde

F I R S T R E P O R T

2-25-75 Used Jim Ludwig to set surface pipe and to drill rat. and mouse hole. Ran 150', 10 3/4" csg, set @ 162' KB. Cntd w/125 sxs Class A, 2% CaCl, circ 20 sxs. Plug down 4 PM 2/25/75.

2-26-75 - WO Rig.
3-3-75

3-4-75 Drlg. @ 300' (137'). Spudded AM 3/4/75. Drlg w/wtr.

3-5-75 Drlg. @ 1156' (856'). Sh. Drlg. w/wtr.

3-6-75 Drlg. @ 1575' (419'). Drlg w/wtr. Stuck pipe @ 2:30 AM. Prep to run free point.

3-7-75 Drlg. @ 1575'. Visc 42, WL 1. Pipe stuck 24 hrs. Back off @ 1479'.
7 AM - 12 N Go International rng free pt.
12 N - 4 PM POOH. LD DC & 2 jts of NB.
4 PM - 8 PM Bit in hole w/jars & bumpers. Jarring on fish.
8 PM - 1 AM Jarring on fish.
10 AM - 12 MN Circ & cond. hole.
12 MN - 5 AM POOH. LD Jars & bumper sub. GIH w/bit.
Cleaned out on top of fish.
5 AM - 6AM Circ. & cond. hole.

- 3-8-75 Drlg. @ 1575'. MW 9.0, Visc 46, PV 20, YP 18, WL 6.8, Sand $\frac{1}{2}\%$, Chl 100, Cal 26, PH 8.5, Gel 4/10, LCM 2/32.
6 AM - 11:30 POOH, Picked up 8 jts washpipe w/mill shoe.
11:30 - 4:45 PM Ran in hole. Wash over fish (7 DC's & bit.)
4:45 PM - 6 PM Condition hole.
6 PM - 9:15 PM POOH, LD wash pipe.
9:15 PM - 11 PM PU fishing tool & GIH.
11 PM - 3:30 AM Screwed into fish, overshot & bumper sub. Jarred loose w/105,000#. POOH, LD fishing tools.
3:30 - 6:00 AM LD btm drill collar. Plugged w/old cmt flakes from DP (from previous job). Ran in hole w/6 DC to insure full opening.
Continue GIH w/bit #4.
- 3-9-75 Drlg. @ 2014' (439') Sd & Sh. MW 9.2, Visc 45, WL 5.2, PV 19, YP 9, Solids 5%, sand $\frac{1}{2}\%$, Chl 100, cal 40, PH 8.5, Gel 2/4, FC 2/32nds.
- 3-10-75 Drlg. @ 2265' (241') Sd & Sh. MW 9.5, Visc 44, PV 28, YP 18, WL 5.8, Sand $\frac{1}{2}\%$, Cal 2.6, PH 8.5, Gel 2.6, FC 2/32nds. Pkr stuck in flow nipple. Took off BOP to cut out. Pressure tested 20" - 1100 psi.
- 3-11-75 Drlg. @ 2520' in sd & sh (255'). MW 9.8, Visc 45, WL 5.8, PH 8.5, FC 2/32nds. Dev. 2⁰ @ 2277'.
- 3-12-75 Drlg. @ 2581' (61') MW 9.5, Visc 39, WL 5.8.
- 3-13-75 Drlg. @ 2961' (380'). MW 9.9, Visc 43, WL 4.2, PH 8.5, FC 2/32nds.
- 3-14-75 Drlg @ 3171' (211') 1 3/4⁰ @ 3021'. MW 10., Visc 51, PV 28, YP 18, WL 5.6, Sand 1.5.
Hit bridge @ 2620', wash to bottom. At 3171' well had slight gas & switched flow thru separator.
- 3-15-75 Drlg. @ 3443' (272'). Sh. MW 11.0, Visc 90, PV 30, YP 17, WL 9.0, Sand 4.0.
- 3-16-75 Drlg @ 3443', sh. 1 3/4⁰ @ 3420'. MW 11.0, Visc 90.0, PV 30.0, YP 17.0, WL 9.0.
Drlg to 3443' and ran open hole logs. GIH w/DP, condition hole, laid DP & DC in preparation of running 7" csg.
- 3-17-75 Drlg. @ 3443' WOC. Ran 7" csg & cmt @ 3443' KB w/288 sxs cmt, plug down @ 8 PM 3/16/75. Ran temperature survey and indicated top of cmt @ 1100'.
- 3-18-75 Drlg. @ 3443' w/gas. Drlg. out cmt.

3-19-75 Drlg. @ 4370' (927') in 16½ hrs. Drlg. w/gas.

3-20-75 Drlg. w/gas @ 5329'. Made 959' in 23½ hrs.

3-21-75 Drlg. @ 5705' w/gas (376'). 3/4° @ 5705'.

3-22-75 Finished running open hole logs. RU & ran 4½" liner, cmt'd w/245 sxs cmt containing 2% gel, 0.6% fluid loss, 5# gilsonite & ½# Flocele. Total cmt volume used was 322'. Started displacement, saw liner wiper plug shear @ correct displacement volume, plug did not land. Over displaced 2 bbl, set hanger pack-off, pulled out setting tool & attempted to reverse out. Unable to reverse out. POOH w/DP & setting tool. Shut down rig @ 8 PM 3/21/75. Ran slick line temp. survey, hit plug back depth @ 3847'. No cmt top behind liner. Liner details as follows:

Float shoe	1.90
62 jts, 4½", 10.5#, ST&C w/insert	2454.00
float, 1 jt above float shoe	
Burns Liner Hanger w/packoff	4.60
	2460.5'

Liner hanger set @ 3239.5', bottom of liner @ 5700'.
SD.

3-23-75 - SD over weekend. Monday will remove BOP's & rig down.
3-24-75

3-25-75 8 hrs spent running in hole w/DP. Came out & laid it down. 4 hrs. spent unnippling B.O.P.'s & rigged down gas separator.
Released rig @ 8 PM 3/25/75.

3-26-75 - W. O. C. U.
5-7-75

5-8-75 M.I. & R.U. completion unit.

5-9-75 G.I.H. w/liner stinger, releasing tool & tbg (2", 8rd EUE). Attempted to screw into liner hanger, could not. P.O.O.H. w/tbg & tools. S.D.O.N.

5-10-75 Loaded hole but would not circulate w/good returns. G.I.H. w/bit, casing scraper, collars & tbg; blew water out of hole until hole was dry. Tagged cmt top 3855' K.B. S.D.O.N.

- 5-11-75 Finished blowing hole dry. Drilled cmt from 3855' to 4196', 341 ft S. D. O. N.
- 5-12-75 Blew hole dry in 1 1/2 hr. Drilled cmt from 4196' to 4924', 728 ft.
- 5-13-75 Blew hole dry and drilled to 5017' (93') in 6 hrs. Hole was producing water, start out of hole with tbg, collars, csg scraper and bit, pulled bit into 7" csg. S. D. O. N.
- 5-14-75 G. I. H. with bit, scraper & tbg to clean 4 1/2" csg to hole. P. O. O. H. G. I. H. with 4 1/2" retrieva-matic packer & tbg, set pkr @ 3261' K. B. R. U. Halliburton & squeezed with 100 sx cement with 2% Ca Cl₂ & 0.6% CFR-Z, final pressure was 1100 psi. left 60' cement in casing. S. D. O. N.
- 5-15-75 Unseated packer & P. O. O. H. G. I. H. with bit, 6 collars, scraper & tbg, tagged cement @ 3755'. Drilled to 3848', pressure tested to 2000 psi & held O. K. No cement from 3848' to fill @ 4924, 90' of fill. Washed out fill to 5014' then drilled hard cement to 5204'. S. D. O. N.
- 5-16-75 Finished drlg out cmt from 5204-5694. Plugged back T.D 5694. S. D. O. N. Will displace hole w/clean water & run logs.
- 5-17-75 R. U. Halliburton, displace hole w/clean water, pressure test pipe to 500 & took water, pumped 3 BPM @ 1000 psi. P. O. O. H. w/tbg & bit. R. U. Dresser & ran gauge ring, cement bond log to correlation log. Found hole @ 3850' by collar locator & cement scattered down to 5350' w/good cement from 5350' to 5690'. S. D. O. N.
- 5-18-75 G. I. H. w/pkr & tbg to isolate hole. Found hole @ 5194. Set pkr @ 4916', squeezed by pumping 200 bbl water, followed by 150 sx Class B w/0.6% CFR-2 & 2% CaCl₂ @ 3 BPM & 1600 psi w/final pressure of 1200 psi. Left 1000 psi on tbg & csg. S. D. O. N.

- 5-19-75 S. D. on Sunday.
- 5-20-75 P. O. O. H. w/tbg & pkr. G. I. H. w/bit, scraper, collars & tbg, tagged cement @ 5010' then drilled cement to 5200'. Circulate hole & pressure test casing, pumped into formation @ 2 BPM to 600 psi, w/ISIP 0. P. O. O. H w/tbg & tools. R. U. Dresser & ran bond log, good cement from 5180' to 5220' resulting from squeeze. S. D. O. N.
- 5-21-75 G. I. H. w/RBP, pkr. & tbg. Tested liner w/tools for additional holes, found holes between 3799'-3892', 5133'-64' & 5195'-5226'. Pulled pkr into 7" csg., left RBP set to S. D. O. N.
- 5-22-75 P. O. O. H. w/tbg & packer. G. I. H. w/tbg & retrieving tool, unseated & P. O. O. H. w/RBP. S. D. O. N.
- 5-23-75 R. U. Blue Jet, perf two 0.5" holes @ 4900'. G. I. H. w/ RBP, pkr & tbg, set RBP @ 5098' & pkr @ 3881', spotted 1 sx sand on RBP. R. U. HOWCO. Pumped 150 bbl water @ 4 BPM & 1000 psi then 150 sx of cmt (50/50 Pozmix, 2% gel, 0.75% CFR-Z), @ 4 BPM & 1000 psi, worked cement but could not get any standing pressure, cleared casing. Opened pkr & csg went on a vacuum, set pkr & S. D. for 5 hr. Pumped 200 sx cmt, cleared tools & S. D. O. N. This A. M., took 8 bbl of water to load tbg then pumped 4 BPM @ 1000 psi. 4 bbl @ 1000 psi.
- 5-24-75 Squeezed w/100 sx Class "B" (12 1/2 lb gilsonite sx 2% CaCl_2 sx) followed by 50 sx Class "B" neat. Displaced cement @ 4 BPM & 1400-2000, cleared tool & left 400 ft cement in csg., final pressure was 2500 psi. S. D. for weekend.
- 5-25-75 (2 Shut down for weekend and holiday.
- 5-27-75
- 5-28-75 P. O. O. H. w/tbg & pkr. G. I. H. w/bit, csg scraper & 6 drill collars, tagged cmt @ 4748', then drilled 248' cmt & reverse hole clean. P. O. O. H. w/tools & tbg. G. I. H. w/pkr & retrieving tool, tested csg to 2000 psi & held. Unseated RBP & P. O. O. H. w/tbg & tools. S. D. O. N. This A. M. running cmt bond log.

- 5-29-75 R.U. Dresser & ran cement bond log, no cement 5000' to 5055'. Perf. 5050' & 5051' w/1 JHPF. G.I.H. w/RBP, pkr & tbg, set RBP @ 5121', dumped sand on RBP to set RP @ 4730. R.U. HOWCO & squeeze w/100 sx (12 1/2# gilsonite Class "B" & 2% Ca Cl₂) & 50 sx neat, worked cement on time & held 2000 psi. Unseat pkr, reversed out, then re-set pkr & left 1500 psi. S.D.O.N.
- 5-30-75 P.O.O.H. w/pkr & tbg, G.I.H. w/bit, csg scraper, collars & tbg, found cement @ 4804' then drilled 261' of hard cement. Circulated hole clean & P.O.O.H. w/tbg & tools. G.I.H. w/pkr & tbg, tested squeeze to 2000 psi, held. S.D.O.N. Preparing to perforate & treat.
- 5-31-75 Pulled tbg, packer & bridge plug out of hole, laid down 6-3" D.C. Rigged down reverse unit & power swivel. S.D.O.N.
- 6-1-75 Rigged up Dresser & perf. 5551-52 (2 holes), 5585-88 (3 holes), 5673 (1 hole). Ran retrievable bridge plug, packer & tbg. Rigged up HOWCO & circulated hole w/treated water. BD perf, max pressure 2800 psig. Pumped 750 gal 15% HCL acid. Pulled tbg, pkr & BP out of hole. Frac'd w/20,000 gal. 5000 gal pad, 900 psig. Treated water @ 28 BPM. 10,000 gal w/20-40 sd, 2#/gal, 700 psig @ 29 BPM. 7,000 gal flush. Rigged up & perf.
- 5488-92 (4 holes)
 - 5482-84 (2 holes)
 - 5476-78 (2 holes)
 - 5422-30 (8 holes)
 - 5404-06 (2 holes)
 - 5396-5400 (4 holes)
 - 5390-92 (2 holes)
- (24 holes)

Preparing to break down this A. M.

6-2'-75

Ran RBP, packer & tbg. in hole. BD down perf interval 5390-5492 in 3 stages. 1500 gal 15% HCl, max pressure 2800 psig. Pulled packer & tbg O. O. H. Rigged up HOWCO to frac. 60,000 gal gelled water in 3 stages. BP @ 5530' (10 gal/1000 super flow, morflo 1 gal/1000, type 200 fluid loss, type W-66 gel 600#/20,000 gal).

<u>Stage</u>	<u>Treating Pressure</u>
(1) 5000 gal pad	50 psig
5000 gal w/3#/gal 100 mesh sd	
10000 gal w/2#/gal 20-40 sd	
dropped 8 balls	
 (2) repeat stage 1	150 psig
dropped 8 balls	
 (3) repeat stage	300 psig
flushed w/treated water	

32 BPM rate average, Rigged up Dresser Atlas & perf 5160-5178 (18 holes). Preparing to BD & treat this date.

6-8-75

Ran retrievable tool & tbg in hole. Circulated sd & balls off BP. Latched on BP & P. O. O. H. Ran RBP pkr & tbg in hole to break down perfs from 5160-78. BP set @ 5220', pkr 5065', BDP 2400 to 2800 psig. Pumped 750 gal 15% HCl acid, dropped 30 balls (strung out through acid every 50 gal). Pulled tbg & pkr out of hole. R. U. Halliburton to frac w/40000 gal 2 stages. Ran 5000 gal pad, 5000 gal w/100 mesh sd 3#/gal 10,000 gal w/20-40 sd 2#/gal. #1 stage: 100 psi for pad, 32 bbl rate/min 5000 gal. 5000 100 mesh 3#/gal in at 1000#. 30 bbl rate/min 10,000 gal. 20-40 2#/gal. 900# pressure, 32 bbl rate/min. 9 balls. Repeated 5,000 pad in at 1050# pressure at 31 bbl rate/min. 5,000 100# mesd sd, 3#/gal in at 1075 psi. 31 bbl rate/min. 10,000 @ 20-40 2#/gal in at 975 psi 31 bbl rate/min. Rigged up Dresser Atlas. Perf:

- 4928-36 (8 holes)
- 4952-56 (4 holes)
- 4980-84 (4 holes)
- 4990-98 (8 holes)
- 5006-14 (8 holes)
- 5022-40 (18 holes)

S. D. O. N.

6-4-75

Ran ret. tool & circulated sd & balls off of BP.
 Latched on BP. P.O.O.H. Ran in hole with
 ret. BP, pkr & tbg to break down perfs. 4928-5040.
 1st sitting: set BP @ 4945', set pkr @ 4915,
 Break down @1300 psi.
 2nd sitting: set BP @ 4970', set pkr @ 4945',
 Break down @ 1400 psi.
 (acid on perfs dropped to 1200)
 3rd sitting: set BP @ 5070, spotted 3 sx sd,
 set pkr 4975, Break down @ 2250 psi.
 Dropped 90 balls strung out in acid. Balls
 on perfs 2750#. No ball off, pumped treated
 water, dropped 30 balls, no ball off.
 P.O.O.H. w/tbg & pkr. R. U. Halliburton to frac
 w/120,000 gal in 6 stages:

<u>Stages</u>	<u>5,000 pad</u> Rate/min	<u>5,000 gal mesh 100</u> (3#/gal) Rate/min	<u>10,000 20-40</u> (2#/gal)Rate/min	<u>Balls</u>
#1	100 psi 40 bbl			
#2	600 psi 40 bbl	475 psi 40 bbl	500 psi 40 bbl	(8)
#3	650 psi 40 bbl	900 psi 40 bbl	550 psi 40 bbl	(8)
#4	850 psi 40 bbl	1050 psi 40 bbl	800 psi 40 bbl	(8)
#5	1100 psi 40 bbl	900 psi 40 bbl	1150 psi 40 bbl	(10)
#6	1150 psi 40 bbl	5,000 gal 100 mesh 1500# psi lowered to 1300 psi & 32 bbl rate/min.	10,000 20-40 1300 psi, 32 bbl rate/min	

Flush with 7,000 gal @ 1300 #32 bbl rate /min.

Instant shut in 4500 psi 4 min - 0.

Additives used: Morflo 67 gal in 67,000 gal fluid
 Superflo 60 gal in 60,000 gal of fluid
 Adomite 1200# 60,000 gal fluid 50#/thousand.
 Gel fluid 120,000 gal, UG-6 3600#, CW-1
 1200#. S. D. O. N.

S. D. O. N.

6-5-75

Ran tbg and in line float. Blew hole dry going in and
 blew sd & balls off BP. P.O.O.H. Ran retrievable
 tool in line float & tbg; latch on BP, pulled BP up in
 7" csg. S. D. O. N.

6-6-75

Finished pulling tbg & BP out of hole. Ran bit, in line
 float & tbg in hole. Cleaned out sand to TD. Pulled up
 in 7" csg. Left well blowing to clean up overnight. Est
 5 1/2-6000 MCF blowing out of csg.

6-7-75 Ran 2 3/8" OD tbg to TD with bit, cleaned out 60' of
frac sd, P.O.O.H., ran 2 3/8" 8rd EUE.
Bottom to top.
 1 2 3/8" 8rd perf jt 29.00'
 1 2 3/8" Baker F Nipple 1.00' (1.80" ID)
 182 2 3/8" 8rd EUE tbg 5640.24'
 5770.24 set @ 5680.00 KB
Installed well head, pumped out plug, rigged down
pulling unit, released 5:00 PM 6-6-75.

6-9-75 - Shut well in, will run state test 6-13-75.
6-15-75 SITP 440 psi, SICP 440 psi.

FINAL REPORT

6-16-75 SPUD DATE 3-4-75 TD 5705 FIELD NAME Blanco
PROD FORM Mesaverde, PERF INTERVALS: 4928-36,
4952-56, 4980-84, 4990-98, 5006-14, 5022-40, 5160-5178,
5390-92, 5396-5400, 5404-06, 5422-30, 5476-78, 5482-84,
5488-92, 5551-52, 5585-88, 5673. INITIAL POTENTIAL
CAOF 12,233 MCF/D FLOWING, NAME OF PURCHASER
CONDENSATE: Caribou, NAME OF PURCHASER, GAS
El Paso Natural Gas, PRICE CONDENSATE \$10.30 ,
PRICE GAS \$.51 + BTU Adjustment.

SITP 446 psig. FTP 146 psig 1,723 MCF/D

State Com J #6A (.TD 5705' SPUD 3-4-75 ELEV 6366' GL CONT Pedco)
Sec. 36, T31N, R9W
San Juan Co., NM

OPER Mesa
PROSP Archuleta
MESA WI 87.5%
EPNG WI 12.5%
TEST Mesaverde
OP NO 10-726-A3

6/12/75

Shut well in, will run state test
6/13/75. SITP 440 psi., SICP 440 psi.

DEVELOPMENT WELL

State Com J #6A (.TD 5705' SPUD 3-4-75 ELEV 6366' GL CONT Pedco)
Sec. 36, T31N, R9W
San Juan Co., NM

FINAL REPORT

OPER Mes-
PROSP Archuleta
MESA WI 87.5%
EPNG WI 12.5%
TEST Mesaverde
OP NO 10-726-A3

6/16/75

SPUD DATE 3-4-75 TD 5705 FIELD NAME
Blanco PROD. FORM Mesaverde, PERF
INTERVALS 4926-36, 4952-56, 4980, 4984,
4990, 4998, 5006, 5014, 5022-40, 5160-78,
5390, 5392, 5396, 5400, 5404-06, 5422-30,
5472-78, 5488-92, 5551, 5552, 5585, 5673.
INITIAL POTENTIAL CAOF 12,233 MCF/D
Flowing, NAME OF PURCHASER CONDENSATE
Caribou, NAME OF PURCHASER, GAS
El Paso Natural Gas, PRICE CONDENSATE
\$10.30 PRICE GAS \$.51 + BTU Adjustment

DEVELOPMENT WELL

SITP 446 psig, FTP 146 psig 1,723 MCF/D

FINAL REPORT

MESA WELL FILE

RECEIVED
APR 10 1975
FORM 56-1
B. & R. SERVICE, INC.
WELL FILED FROM OFFICE
DO NOT REMOVE FROM OFFICE
PROD.

TEMPERATURE SURVEY

COMPANY..... MESA PETROLEUM CO.
WELL..... 6A..... LEASE..... STATE..... COMIT
COUNTY..... SAN JUAN..... STATE..... NEW MEXICO
SEC..... TWP..... RGE.....

APPROX. TOP CEMENT..... 1020'

Survey Begins at..... 500'..... Ft. Ends at..... 3388'..... Ft.
Approx. Fill-Up..... Max. Temp.....
Log Measured From..... KB..... Run No..... 1

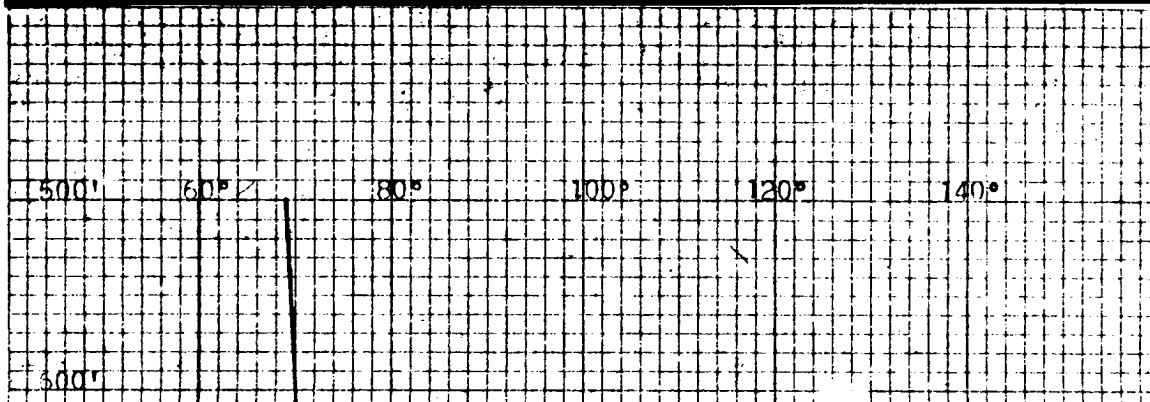
Casing Size	Casing Depth	Diam of Hole	Depth
7" from.....	to 3380'	8 3/4" from.....	to.....
from.....	to.....	from.....	to.....

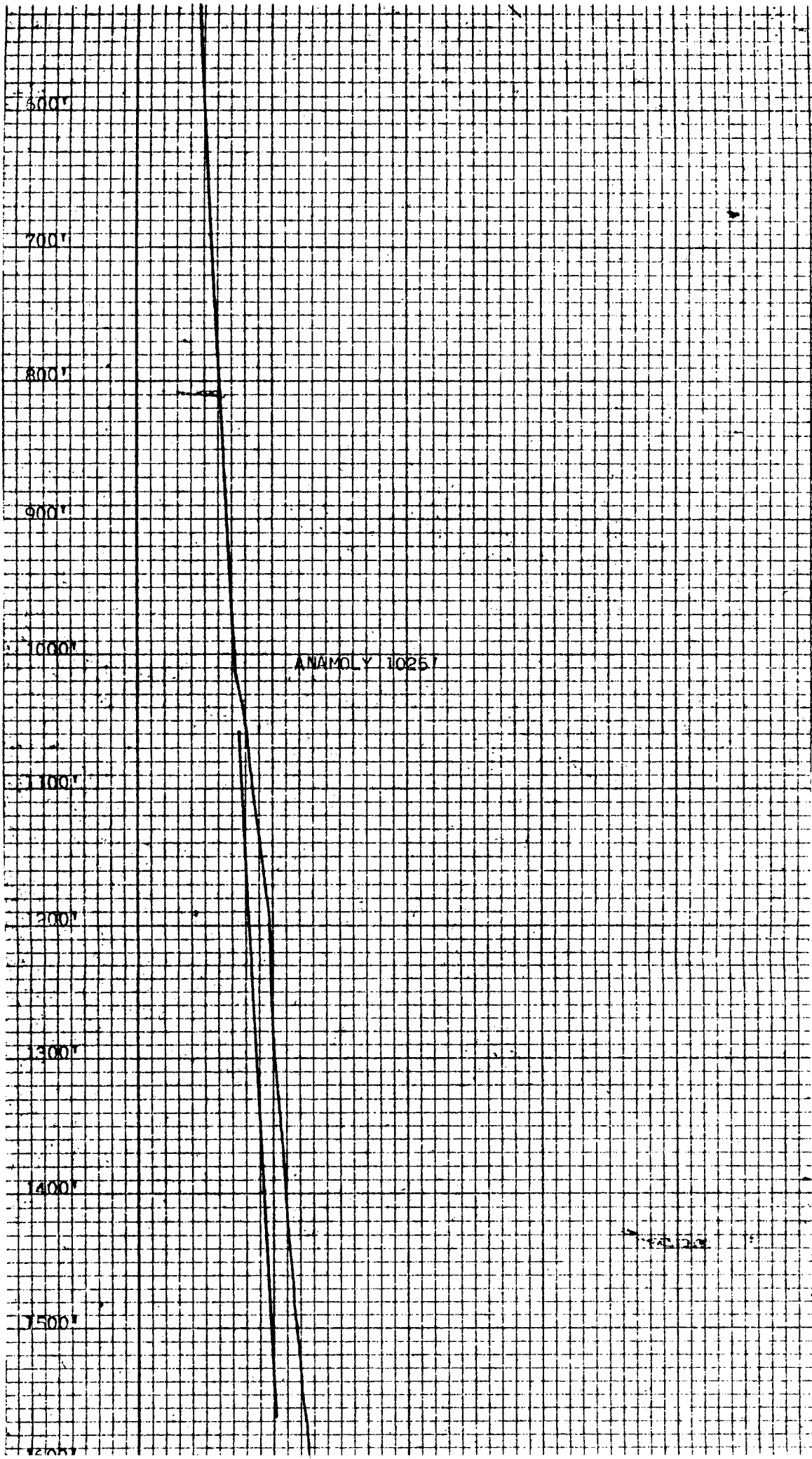
Date of Cementing..... 3-16-75..... Time..... 8:00 PM
Date of Survey..... 3-17-75..... Time..... 4:00 AM
Amount of Cement.....

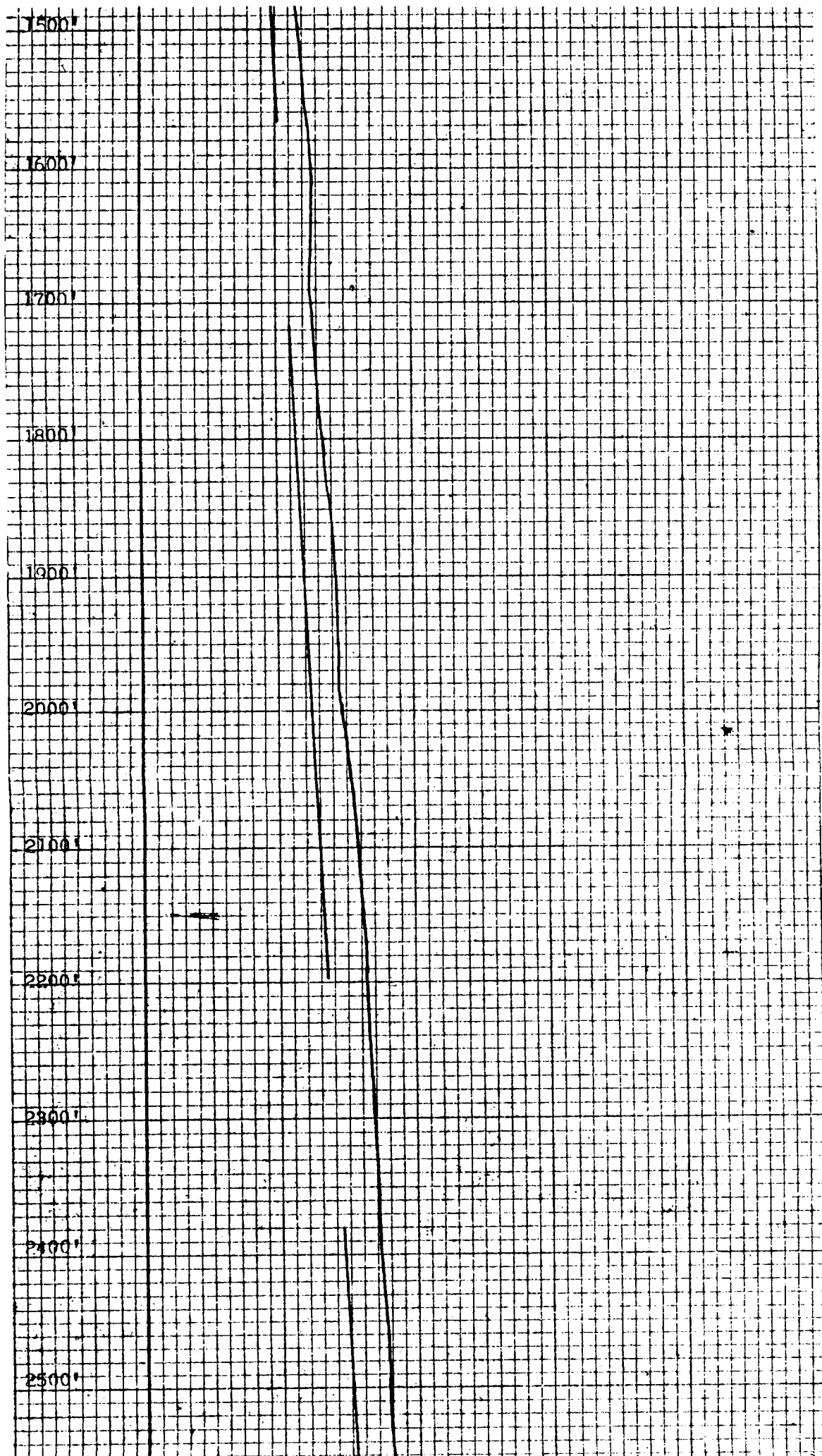
Recorded by..... WILSON..... Witnessed by.....

REMARKS OR OTHER DATA

TEMPERATURE IN DEGREES FAHRENHEIT







RECEIVED
B. & R. SERVICE, INC.
APR 10 1975
TAMA, PROD.

FORM 56-1

TEMPERATURE SURVEY

COMPANY..... MESA PETROLEUM CO.
WELL..... 6-A..... LEASE..... STATE.....
COUNTY..... SAN JUAN..... STATE..... NEW MEXICO
SEC..... TWP..... RGE.....

APPROX. TOP CEMENT..... 3243'

Survey Begins at 2500'..... Ft. Ends at 3847'..... Ft.
Approx. Fill-Up..... Max. Temp.....
Log Measured From KB..... Run No. 1

Casing Size	Casing Depth	Diam of Hole	Depth
4 1/2" from 3243' to 5675'	7 1/4" from	to 5675'	
from	to	from	to

Date of Cementing 3-22-75..... Time 3:00 PM
Date of Survey 3-22-75..... Time 11:00 PM
Amount of Cement.....

Recorded by WILSON..... Witnessed by.....

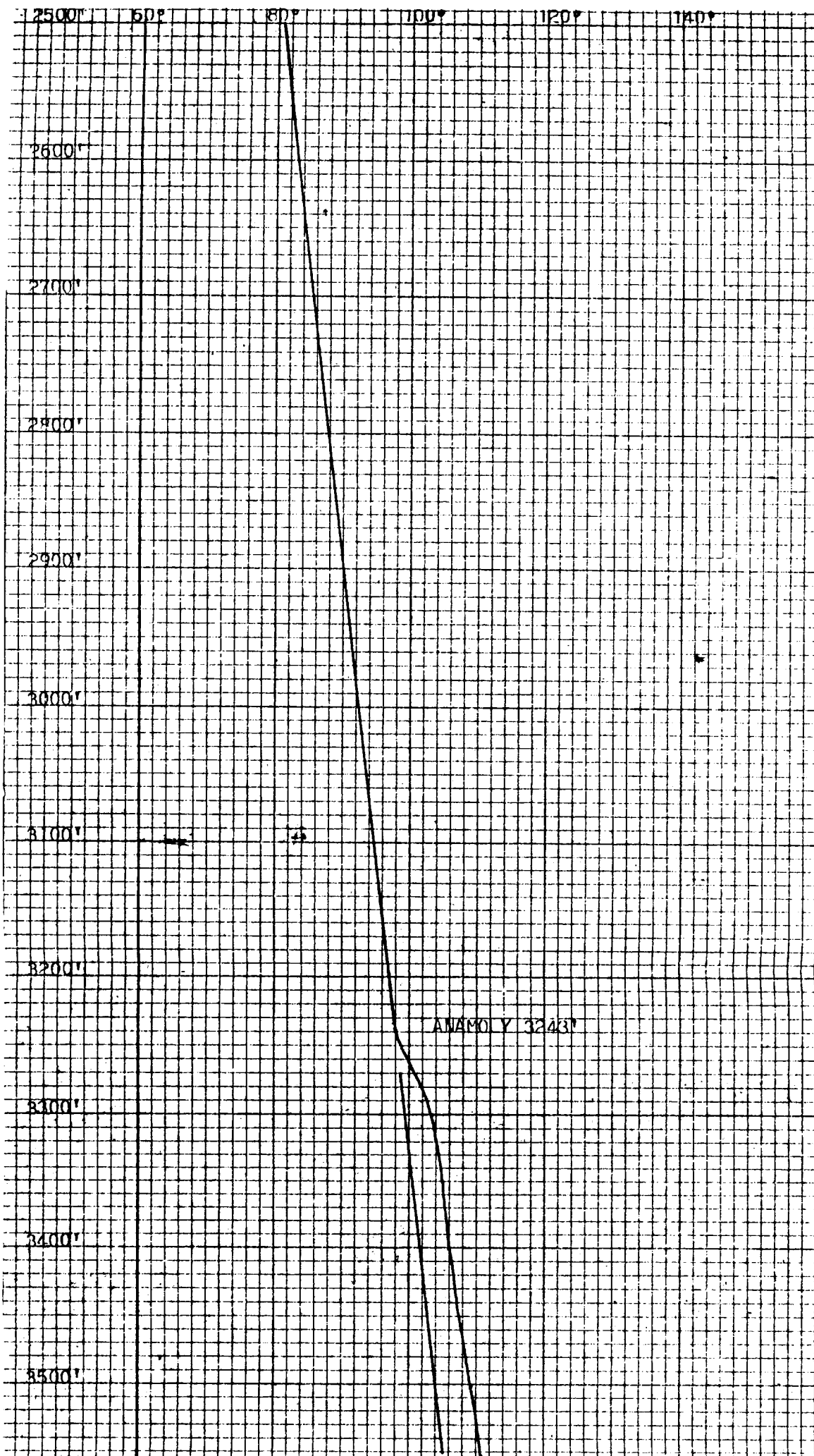
REMARKS OR OTHER DATA

TOP OF LINER @ 3243'

TEMPERATURE IN DEGREES FAHRENHEIT

2500' 50° 80° 100° 120° 140°

2600'





Log run after 4 1/2" set

**Acoustic
Cement Bond Log**
VDL Signature

FILE NO. FM-5174

COMPANY MESA PETROLEUM COMPANY

RECEIVED

WELL STATE COM. J6A

JUN 18 1975

FIELD BLANCO MESAVERDE

COUNTY SAN JUAN STATE NEW MEXICO

AMA PROD.

LOCATION:

850 FSL & 1680 FEL

WELL FILE

Other Services

SEC 36

DO NOT REMOVE FROM OFFICE

TWP 31N RGE 9W

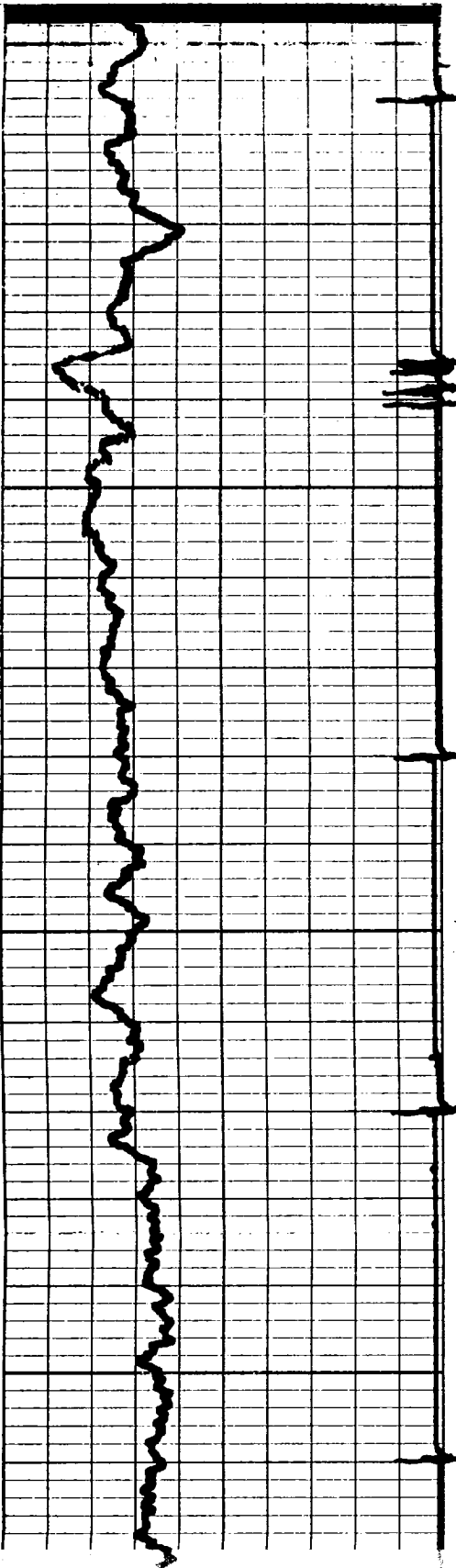
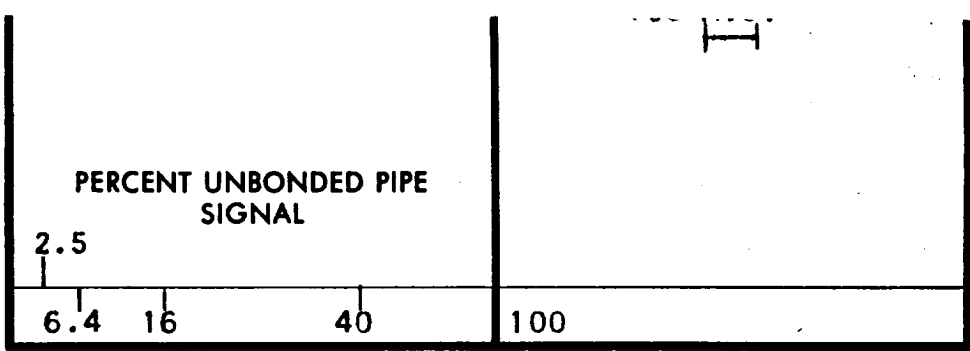
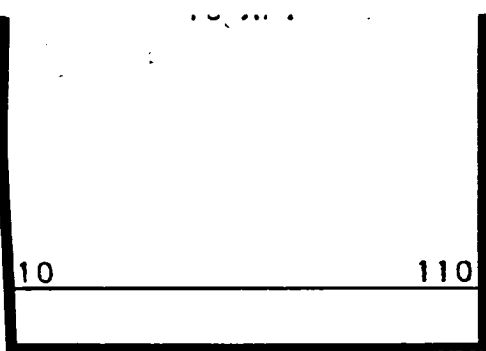
Permanent Datum G.L. Elev. 6366
 Log Measured from K.B., 13.0 Ft. Above Permanent Datum
 Drilling Measured from K.B.

Elevations:
 KB 6379
 DF
 GL 6366

Date	5-16-75	CSG. RECORD	Surface	Protection	Production	Liner
Run No.	ONE	Size	13 3/8	7	4 1/2	
Depth-Driller	5694	Wt./Ft.	32	23	10.5	
Depth-Logger	5690	Grade	J-55	J-55	CW-55	
Bottom Logged Int.	5687	Type Joint	8R	8R	8R	
Top Logged Int.	3200	Top	SURF.	SURF.	3245	
Ft. Measured	2687	Bottom	164	3446	5712	
Type Fluid in Csg.	H2O	PRIMARY CEMENTING DATA				
Density of Fluid		Type Cement	B			
Fluid Level		Vol. of Cement	125			
Max. Temp. Deg. F.		Additive	CACL			
Tool Series No.	1408M	% Additive	2			
Tool Diam.	3 5/8	Retarder				
Standoff Size		% Retarder				
Logging Speed	50	Slurry Wt.	-			
R/A Log Type	GR	Water Loss	-			
T.C.	01	Drig. Mud Type	FRESH H2O			
Sens. Setting	202	Drig. Mud Wt.				
API Units/Div.	10	PRIMARY CEMENTING PROCEDURE				
Truck or Unit No.	3028	Started Pumping	HR. DATE	Preceding Fluid		
Location	FARM.	Plug on Bottom		Vol. Bbls.		
Opr. Rig Time		Pres. Released		Returns: Full Partial None		
Recorded by	CLAY	Started Bond Log		Pipe Rot. During Pumping: Yes No		
Witnessed by	ARCHER	Finished Bond Log		Pipe Rot. After Plugdown: Yes No		

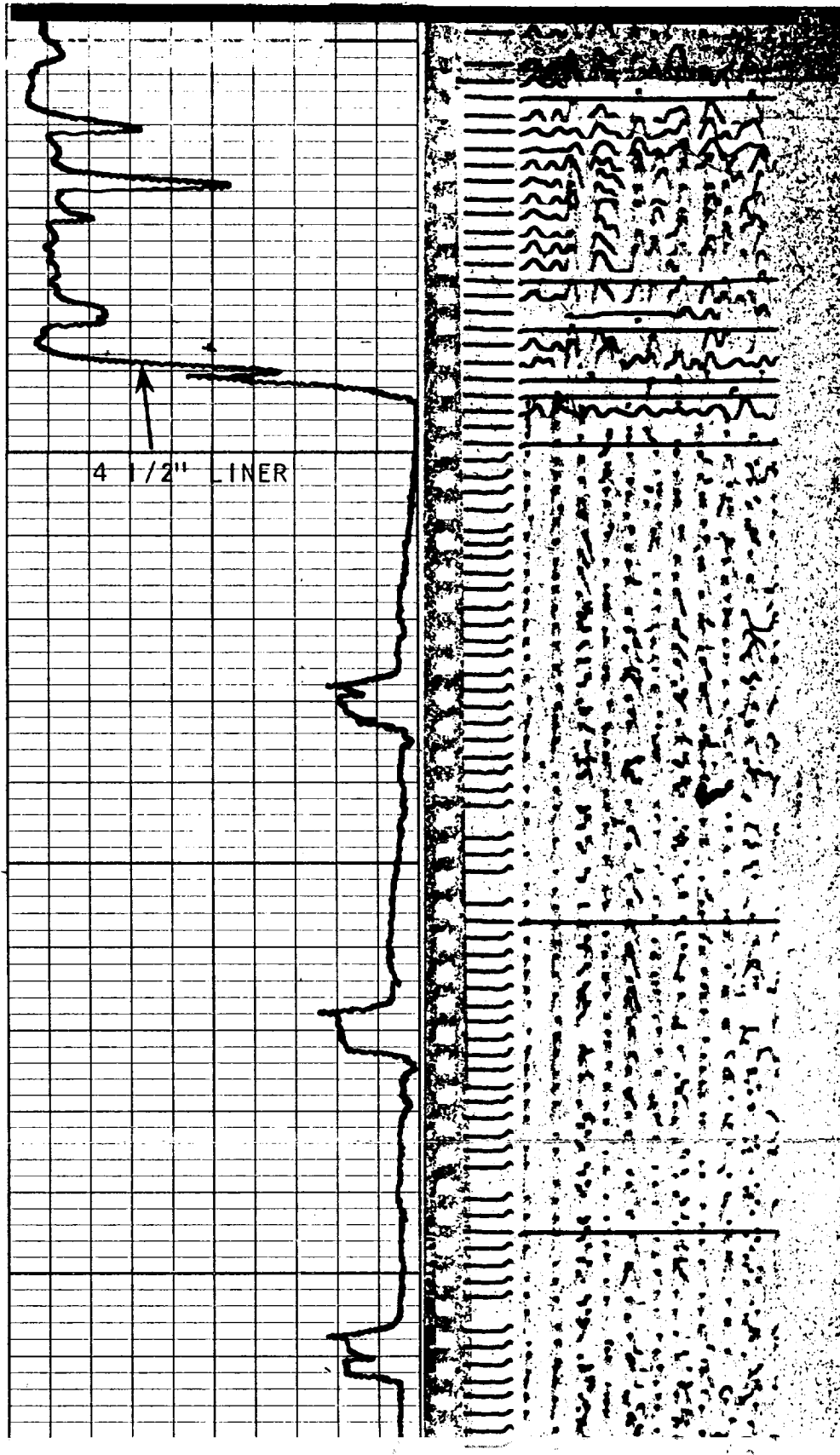
.6 OF 1% FLO SEAL

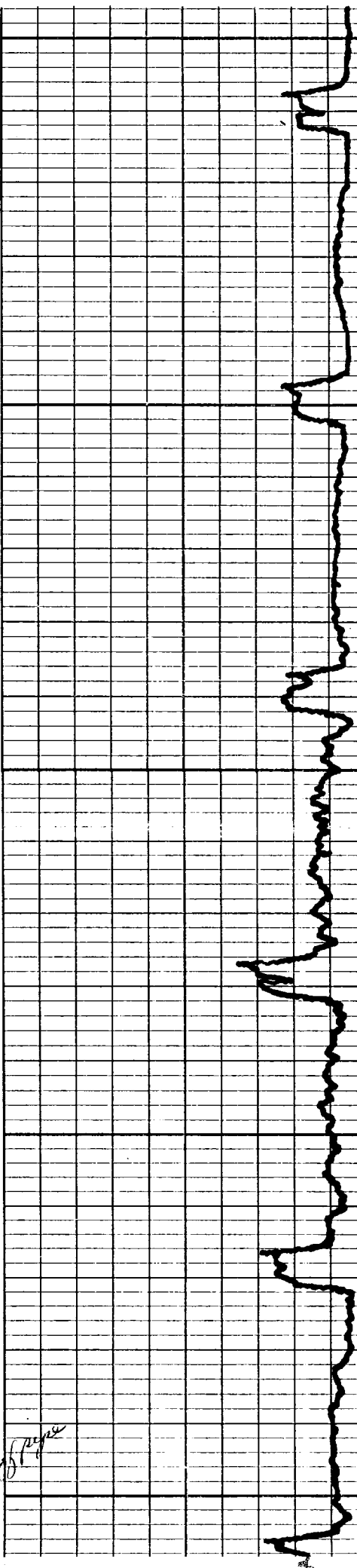
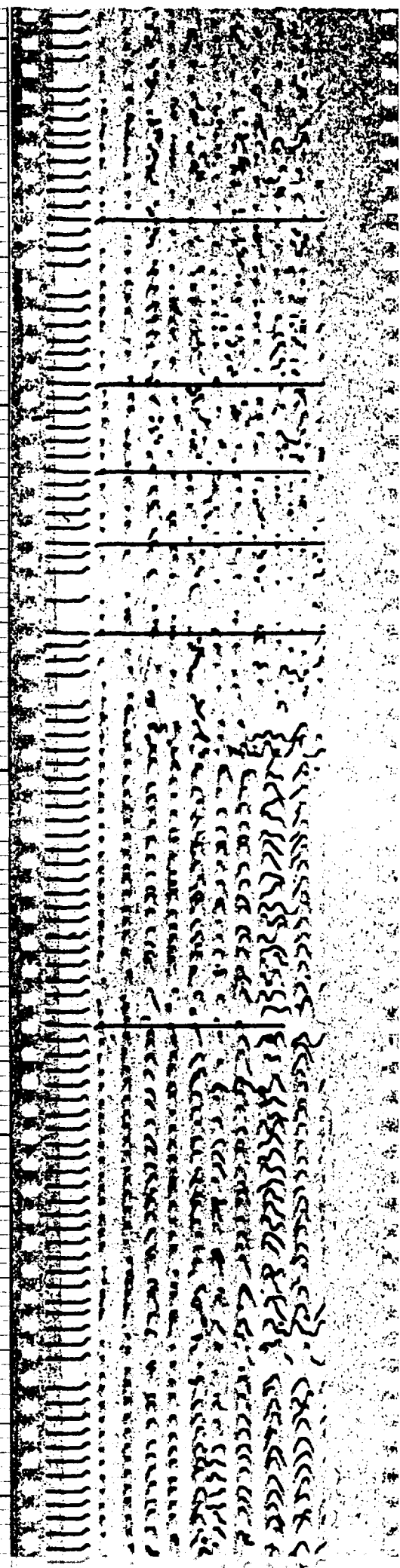
	DEPTH	COMPRESSION WAVE AMPLITUDE	
		AMPLITUDE INCREASES →	
10 API			100 M.S. ┌───┐
		PERCENT UNBONDED PIPE SIGNAL	



3200

3300

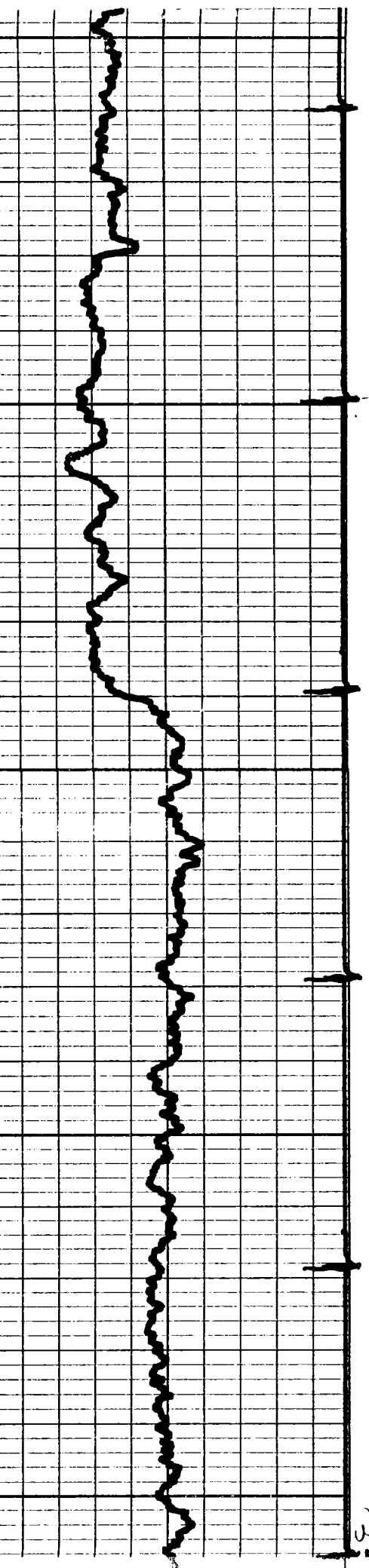




3400

3500

where
act just before



SAN JUAN OPERATIONAL UNIT
STATE COM J #6A; ESTIMATED TOC
ASSUMES 25% CEMENT LOST TO FORMATION

VOLUME (CUBIC FEET) = NUMBER SACKS * CUBIC FEET/S
AREA (SQ. FT.) = $\pi((\text{HOLE SIZE}/2)^2 - (\text{CASING SIZE}/2)^2)/144$
HEIGHT (FEET) = VOLUME (CU. FT.) / AREA (SQ. FT.) * .75 (SLURRY EFFICIENCY)
ESTIMATED TOC (FEET) = DEPTH (FEET) - HEIGHT (FEET)

I: SURFACE CASING:

SIZE: 10.750 "
HOLE: ES 13.750 "
GRADE: N/A
WEIGHT: N/A #/FT
DEPTH: 162 '
TOC: CIRC '
CEMENT: 125 SACKS
1.18 CUFT/SX
- SACKS
- CUFT/SX

VOLUME CU. FT.	AREA SQ. FT.	HEIGHT FEET	EST. TOC FEET
LEAD	0.401	276	
147.5			
TAIL			
0.0			(114)

NONE
2ND DV
TOOL

III

IV: 2ND DV TOOL:

TOC: - '
CEMENT: - SACKS
- CUFT/SX
- SACKS
- CUFT/SX

VOLUME CU. FT.	AREA SQ. FT.	HEIGHT FEET	EST. TOC FEET
LEAD	0.150	0	0
0.0			
TAIL			
0.0			

NONE
1ST DV
TOOL

II

III: 1ST DV TOOL:

TOC: - '
CEMENT: - SACKS
- CUFT/SX
- SACKS
- CUFT/SX

VOLUME CU. FT.	AREA SQ. FT.	HEIGHT FEET	EST. TOC FEET
LEAD	0.150	0	0
0.0			
TAIL			
0.0			

II: INTERMEDIATE OR PRODUCTION CASING:

SIZE: 7.000 "
HOLE: 8.750 "
GRADE: K-55
WEIGHT: 23.00 #/FT
DEPTH: 3,443 '
TOC: 1,100 '
CEMENT: 288 SACKS
EST. 1.18 CUFT/SX
- SACKS
- CUFT/SX

VOLUME CU. FT.	AREA SQ. FT.	HEIGHT FEET	EST. TOC FEET
LEAD	0.150	1,695	1,748
339.8			
TAIL			
0.0			

3,240
TOL:

V V: PROD.
LINER:

SIZE: 4.500 "
HOLE: 6.250 "
GRADE: CW-55
WEIGHT: 10.50 #/FT
DEPTH: 5,700 '
TOC: 3,847 '
CEMENT: 245 SACKS
EST. 1.30 CUFT/SX
- SACKS
- CUFT/SX

VOLUME CU. FT.	AREA SQ. FT.	HEIGHT FEET	EST. TOC FEET
LEAD	0.103	2,327	3,373
318.5			
TAIL			
0.0			

5,694 ' PBTD
5,707 ' TD