Form OGC-1a

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work: DRILL ☐ DEEPEN ☐ PLUG BACK ☐

b. Type of Well: Oil Well ☒ Gas Well ☐ Other Single Zone ☐ Multiple Zone ☐

2. Name of Operator: TXP OPERATING COMPANY ATTN: Ms. KAY L. MORGAN (713) 439-2000

3. Address of Operator: P. O. BOX 1396, HOUSTON, TEXAS 77251

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FWL & 660' FNL of SEC. 25 (NW¼ NW¼)
At proposed prod. zone: Same

5. Lease Designation and Serial No.: FEE
6. If Indian, Allottee or Tribe Name: --
7. Unit Agreement Name: --
8. Farm or Lease Name: TXPOC CROWLEY RANCH
9. Well No.: 1-25
10. Field and Pool, or Wildcat: WILDCAT
11. Sec., T., R., M., or Blk. and Survey or Area: SEC. 25, T34S, R25E
12. County or Parrish: SAN JUAN 13. State: UTAH

14. Distance in miles and direction from nearest town or post office*: Approximately 1½ miles south of Eastland, Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any): 660'
16. No. of acres in lease: 320
17. No. of acres assigned to this well: 160
18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.: N/A
19. Proposed depth: 6000' AKAH SALT DESERT CREEK
20. Rotary or cable tools: Rotary
21. Elevations (Show whether DF, RT, GR, etc.): 6893.7' (Ungraded)
22. Approx. date work will start*: February 15, 1984

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
20"	13-3/8"	Culvert	100'	Cement to Surface
12¼"	9-5/8"	36#, K-55	2100'	750 sx (Circ. to surface)
7-7/8"	5-1/2"	17#, N-80	6000'	500 sx

Transco proposes to drill this well to 6000' to test the Pennsylvanian Akah Salt and Lower Desert Creek formations. If productive, casing will be run to TD and the well will be completed. If dry, the well will be plugged and abandoned in accordance with Utah state regulations.

RECEIVED
JAN 16 1984
DIVISION OF
OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Signed: [signature] Title: Drilling Superintendent Date: 01-09-84

(This space for Federal or State office use)

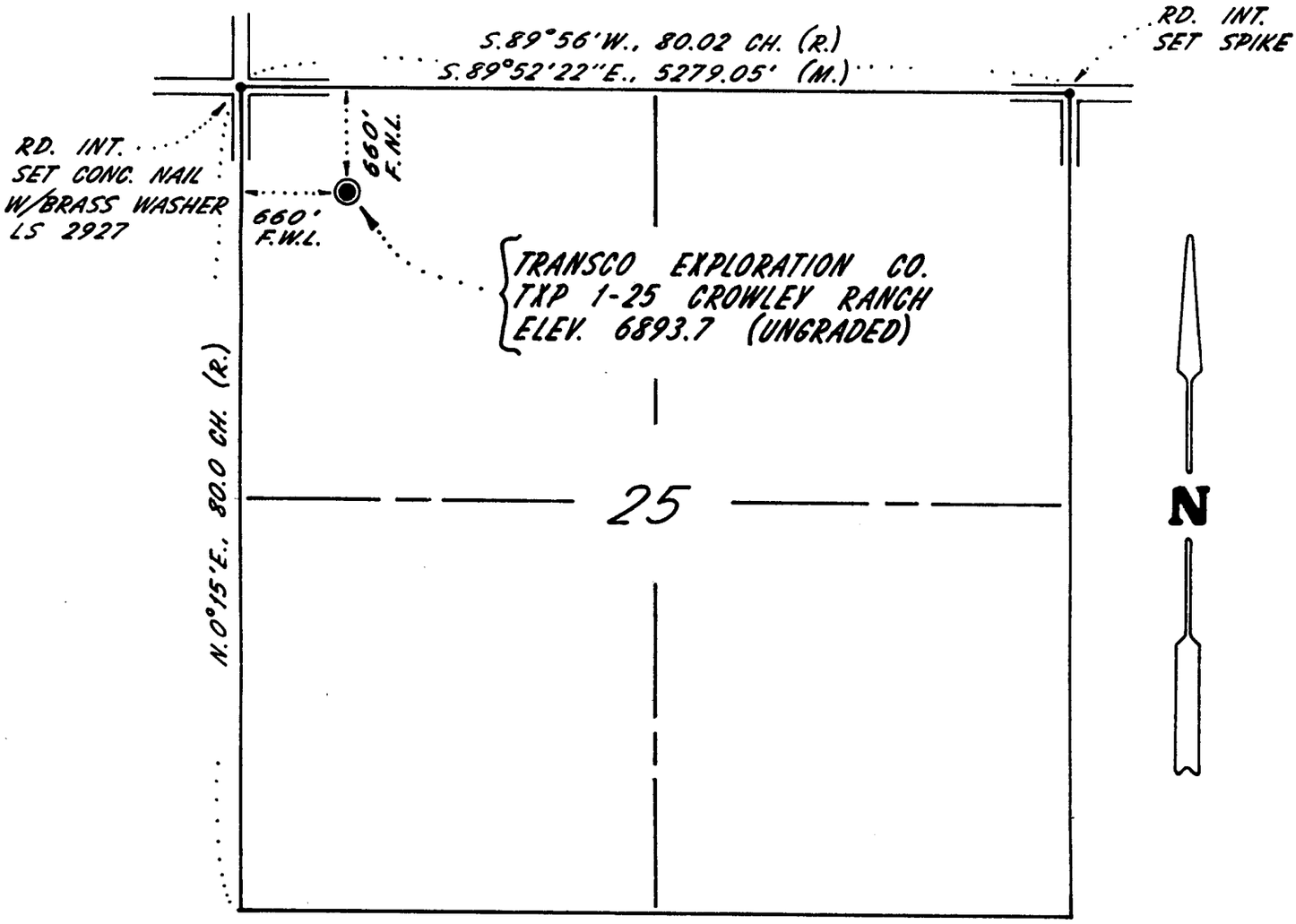
Permit No. Approval Date:

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 1/16/84
BY: [signature]

Conditions of approval:

*See Instructions On Reverse Side

T.34S., R.25E., SALT LAKE BASE & MERIDIAN
SECTION 25



(R) = RECORD DATA
(M) = MEASURED DATA THIS SURVEY

◉ = SURVEYED WELL LOCATION
SCALE: 1" = 1000'

PLATTED FIELD NOTES OF A SURVEY
MARKING WELL LOCATION TRANSCO EXPLORATION CO.
TXP 1-25 CROWLEY RANCH
NW 1/4 NW 1/4 SEC. 25, T.34S., R.25E., S.L.B.&M.
SAN JUAN CO., UTAH

UNGRADED ELEVATION OF WELL LOCATION 6893.7
UNGRADED ELEVATIONS OF REFERENCE POINTS SET WITH 3/8" X 12" SPIKES:

NORTH	120	FEET	6893.4
SOUTH	175	"	6906.2
EAST	200	"	6895.5
WEST	200	"	6889.0

BASIS OF ELEVATIONS: ROAD INTERSECTION ELEVATION AT NE COR. SECTION 25, U.S.G.S. 15' QUAD "EASTLAND, UTAH-COLO.", PRINTED EL. 6810

SURVEYORS CERTIFICATE

STATE OF WYOMING)
COUNTY OF NATRONA) S.S.

I, PAUL A. REID, HEREBY STATE THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF UTAH UNDER THE PROVISIONS SET FORTH BY UTAH LAW. I FURTHER STATE THAT THIS PLAT REPRESENTS A FIELD SURVEY MADE BY ME OR OTHERS UNDER MY DIRECT SUPERVISION FOR THE PURPOSE OF A NOTICE OF INTENTION TO DRILL. ON THE BASIS OF MY INFORMATION, KNOWLEDGE AND BELIEF AS A PROFESSIONAL LAND SURVEYOR, I BELIEVE THIS PLAT EXHIBITS SAID FIELD SURVEY CORRECTLY. ALSO, THE USE OF THIS PLAT WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE SURVEYOR IS PROHIBITED.

REGISTERED SURVEYORS IN:
WYOMING - UTAH - COLORADO - NEVADA - NEBRASKA
NORTH AND SOUTH DAKOTA - CALIFORNIA
U.S. MINERAL SURVEYOR

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
PAUL A. REID
5669
STATE OF UTAH

PAUL A. REID, R.L.S., M.S.
UTAH L.S. NO. 5669

PATHFINDER SURVEYORS
300 COUNTRY CLUB ROAD (SUITE 305)
CASPER, WYOMING (307) 266-3809

JOB NO.: 123-12183
DATE: DEC. 20, 1983
FIELD NOTES: W.L. BOOK NO. 9
PG'S 12-15

TRANSCO EXPLORATION COMPANY
TXP #1-25 CROWLEY RANCH
DRILLING PROGNOSIS

1. Surface Formation: Cretaceous Dakota Undifferentiated.

2. & 3. Formation Tops: Ground Elevation - 6893'

A. Morrison - 299'
B. Chinle - 2014'
C. Cutler - 2758'
D. Honaker Trail - 4384'
E. Paradox - 4996'
F. Upper Ismay - 5562'
G. Lower Ismay - 5699'
H. Upper Desert Creek - 5825'
I. Lower Desert Creek - 5882'
✓J. Salt - 5694'
K. TD - 6000'

If any water zones are encountered, they will be adequately protected and reported; none anticipated. The 2000' of surface casing will protect any near surface fresh water zones.

4. Casing Programs: (All New)

Hole Size	Interval	Size	Weight Grade	Cement Type
20"	0-100'	13-3/8"	Culvert	
12¼"	0-2100'	9-5/8"	36#, K-55	"B"
7-7/8"	0-6000'	5-1/2"	17#, N-80	"B" Pozmix

5. Minimum Pressure Control Equipment: (Schematic Attached)

Type : 10" - 900 Series (Double gate hydraulic w/manual and remote controls)
Pressure Rating : 3000 psi
Testing Procedure: Equipment will be pressure tested to 70% internal yield strength surface casing and operational checks will be made daily and recorded on tour sheet.

6. Mud Program: (Visual Monitoring)

Interval	Mud Type	Mud Wt (ppg)	Viscosity (sec/at)	W.L.
0-2100'	Water, Gel, Lime	8.4 - 8.6	25 - 35	N/C
2100-6500'	LSND	8.5 - 11.6	35 - 45	15 cc or less

RECEIVED
JAN 18 1984
DIVISION OF
OIL, GAS & MINING

6. Mud Program (Con't)

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise. Mud inventory to be stockpiled on location. Will not be less than the amount needed for the mud systems as required to drill this well.

7. Auxiliary Equipment:

A. A lower kelly cock will be kept in the string at all times.
B. Periodic checks will be made each tour of the mud system.
C. A stabbing valve will be kept on the derrick floor to be stabbed into the drill pipe whenever the kelly is not in the string.
D. No bit float will be used.
E. Monitoring of the mud system will be visual and flow sensor device.

8. Evaluation Program:

Logs: DIL, FDC-CNL, BHC - total depth to surface.
Cores: Possible sidewall cores, open hole desert creek.
DST's: Two (2) or as warranted by shows or logs.
Stimulation: No stimulation has been formulated for this test at this time. If production casing is run, the potential producing interval will be perforated with jets. The State will be notified by "Sundry Notice" of a complete stimulation program. The drillsite, as approved, will be of sufficient size to accomodate all completion activities.

9. Abnormal Conditions:

It is not anticipated that abnormal temperatures, pressures or toxic gases will be encountered. No H_2S has been reported or know to exist from previous drilling in the area at this depth.

10. Drilling Activity:

Anticipated Commencement Date:	January 20, 1984
Required Drilling Days:	Approximately 25
Required Completion Days:	Approximately 30

RECEIVED
JAN 19 1984
DIVISION OF
OIL, GAS & MINING

Key

Directions to TXP 1-25 Crowley Ranch

From Monticello, Utah go 11.5 miles East on U.S. Highway 666, turn right on paved road. Drive 4 miles to road intersection, (just south of Eastland, Utah). Turn left on paved road. Drive approximately 0.1 mi. and turn right at fence gate onto dirt road. Drive through gate and continue approximately 0.2 miles to wellsite.

RECEIVED
JAN 18 1984
DIVISION OF
OIL, GAS & MINING

OPERATOR TXP Operating Co N DATE 1-12-84

WELL NAME TXPOC Crowley Ranch #1-25

SEC NWNW25 T 34S R 25E COUNTY San Juan

43-037-30978	Fee
API NUMBER	TYPE OF LEASE

POSTING CHECK OFF:

[ ] INDEX	[ ] MAP	[ ] HL
[ ] NID	[ ]	[ ] PI

PROCESSING COMMENTS:

~~Need bond (new Co. operated by Transco Expl. Co.)~~ Bond rec'd.

Water

No other oil wells within 1000'

CHIEF PETROLEUM ENGINEER REVIEW:

1/16/84

APPROVAL LETTER:

SPACING: [ ] A-3 _____ UNIT [ ] c-3-a _____ CAUSE NO. & DATE

[✓] c-3-b [ ] c-3-c

SPECIAL LANGUAGE:

Water

- [x] RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.
- [x] AUTHENTICATE LEASE AND OPERATOR INFORMATION
- [NO] VERIFY ADEQUATE AND PROPER BONDING
- [x] AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.
- [ ] APPLY SPACING CONSIDERATION
  - [ ] ORDER _____
  - [ ] UNIT _____
  - [x] c-3-b
  - [ ] c-3-c
- [x] CHECK DISTANCE TO NEAREST WELL.
- [ ] CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.
- [x] IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER
- [x] IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.
- [NO] VERIFY LEGAL AND SUFFICIENT DRILLING WATER

January 16, 1984

TXP Operating Company
P. O. Box 1396
Houston, Texas 77251

RE: Well No. TXPOC Crowley Ranch #1-25
NWNW Sec. 25, T. 34S, R. 25E
660' FNL, 660' FWL
San Juan County, Utah

Gentlemen:

Approval to drill the above referenced oil well is hereby granted in accordance with Rule C-3 (b), General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.

2. Submittal to the Division of completed Form OGC-8-C, Report of Water Encountered During Drilling.

3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify R. J. Firth, Chief Petroleum Engineer, Telephone (801) 533-5771 (Office), 571-6068 (Home)

The API number assigned to this well is 43-037-30978.

Sincerely,

R. J. Firth
Chief Petroleum Engineer

RJF/as
Enclosures

Transco
Exploration Company
A Subsidiary of Transco Energy Company

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

DIVISION OF
OIL, GAS & MINING

March 16, 1984

STATE OF UTAH
Department of Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

ATTN: Mr. Ron Firth

RE: Request for Confidential Status

Gentlemen:

TXP Operating Company requests that all reports filed with State of Utah be kept **confidential** for a period of (6) six months on the **TXP #1-25 CROWLEY RANCH in** San Juan County, Utah.

If additional information is required, please contact Tina Rios at (713) 439-3503.

Sincerely,

TXP OPERATING COMPANY

Tina M. Rios

for Kay L. Morgan, Supervisor
Regulatory & Environmental Affairs
For Transco Exploration Company
Managing General Partner

/TMR

walk OK

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: TXP

WELL NAME: CROWLEY RANCH 1-25

SECTION NWNW 25 TOWNSHIP 34S RANGE 25E COUNTY SAN JUAN

DRILLING CONTRACTOR ARAPAHOE

RIG # 2

SPUDDED: DATE 3-29-84

TIME 9:30 AM

HOW ROTARY

DRILLING WILL COMMENCE

REPORTED BY TINA

TELEPHONE # 713-439-3503

DATE 3-30-84 SIGNED AS

UTAH STATE
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
INSPECTION RECORD - DRILLING

DATE/TIME: 29 Mar 84 0900
LOCATION: NWNW Sec 25 T34S R25E
FIELD/UNIT: Wildcat
COUNTY: San Juan
SPUD DATE: still setting up rig
STATUS: DRILLING @ —
INSPECTOR: deGruyter

WELL NAME: TXPOC Crowley Ranch 1-25
OPERATOR/REPRESENTATIVE: TXP Operating
CONTRACTOR/RIG: Arapaho #2
LEASE NO. FEE
TESTING @: —
INC ISSUED: —

SEE REMARKS ON REVERSE

GENERAL	YES	NO	
1. Is copy of approved drilling permit and operations plan available on location?			
2. Is drill site properly identified?			
3. Is surface use in accordance with approved plan? Circle items in violation. (new access roads and improvements to existing roads)(well site layout) (pits, sumps, and other ancillary facilities)(containment and disposal of solid, liquid, and gaseous wastes)(source of water supply and construction material)(erosion control)(noise level)(aesthetics) (protection of biota, cultural resources, and other surface resources and uses)			
4. Is general housekeeping satisfactory?			
5. Are personnel safety practices acceptable? (hard hats, no smoking, fire extinguishers, derrickman safety and escape devices, etc.) If no identify.			
6. Has operator reported all spills (if any)?			
7. Is rig lighting vapor-proof or explosion-proof?			
8. Are all production tests run during daylight hours (unless test commenced during daylight continues at stabilized flow rate)?			
BLOWOUT PREVENTER AND ASSOCIATED EQUIPMENT	**YES**	**NO**	
9. Is BOP type, pressure rating, and arrangement rated to at least that approved?			
10. Are choke line and manifold, fill line, and kill lines properly installed and operable?			
11. Are controls installed and functional? Circle defective or missing items. (automatic on floor) (remote automatic) (hand wheels)			
12. Is pressure accumulator system adequate to activate BOP?			
13. Are ram-type preventers tested to stack working pressure (or 70 percent of internal yield pressure of casing, if less or to psi as approved)?			
14. Are annular type preventers tested to 50 percent of working pressures?			
15. Are preventer pressure tests run and recorded in driller's log? (a) When initially installed? (b) Before drilling out after each casing string is set? (c) Following repairs? (d) Before drilling into a known high-pressure zone?	—	—	— —
16. Is annular preventer activated at least weekly and recorded in driller's log?			
17. Are pipe rams activated at least each trip and recorded in driller's log?			
18. Are blind rams activated at least each trip and recorded in driller's log?			
19. Does mud hose have safety chain?			
20. Slow pump speed for kill purposes recorded?			
21. Are BOP drills conducted at least weekly for each drilling crew and recorded in driller's log?			
22. Are drill string safety valves to fit all size of pipe in the drill string maintained in the open position of the rig floor?			
23. Is upper kelly cock and/or essentially full opening lower kelly cock capable of running through BOP installed at bottom of kelly?			
24. Is kelly cock wrench available for immediate use?			
CASING AND CEMENTING	**YES**	**NO**	
25. When setting surface casing did cement circulate to surface? If not, was remedial action taken?			
26. When setting _____ casing did cement job seem proper? If not, was remedial action taken?			
27. Were all casing strings pressure tested prior to drilling out? (a) Was remedial action taken if test indicated need? (b) Were all pressure tests recorded in driller's log?	—	—	— —
28. Were all WOC times adequate?			
29. Was casing run in accordance with approved plan of operations (size, weight, grade, depth)?			

D PROGRAM		NO	
30. Is mud system in accordance with approved plan?			
31. Are mud tests recorded in driller's log?			
32. Is mud monitoring equipment in accordance with approved plan of operations?			
33. Is mud conditioned by circulating prior to tripping?			
34. Is annulus filled if mud level drops below 100 feet while tripping?			
35. Are piping, separation equipment, and tankage installed to handle hydrocarbon flows during testing?			
ECIAL OPERATIONS - AIR/GAS DRILLING	YES	NO	
36. Is rotating head properly installed?			
37. Is flare pilot light installed and operating?			
38. Is deduster equipment installed, if required?			
39. Is mud circulating equipment available for rapid installation (including reserve and steel pits)?			
ROGEN SULFIDE OPERATIONS	YES	NO	
40. Are number, locations, and access to safe briefing areas adequate?			
41. Are H_2S safety instructions and contingency plan posted?			
42. Is required personnel safety equipment available? (Protective breathing apparatus) (Resuscitator) (Portable H_2S detectors) (First aid kit)			
43. Have weekly H_2S drills been held and recorded on driller's log?			
44. Is H_2S detection and monitoring equipment properly installed with sensing points at critical locations?			
45. Is wind direction equipment installed?			
46. Are danger signs and flares available?			
47. Is kill line installed to safe area?			
48. Is flare system installed?			
49. Is mud/gas separator installed and operable?			
50. Are explosion-proof ventilation fans available for use?			
51. Is pH of water base mud maintained at 10.0 or above?			
52. Is mud system treated with H_2S neutralizing additive when required?			
THER	YES	NO	
53. Special requirements per approved plan (list).			
ESCRIPTION OF OPERATIONS WITNESSED			
EMARKS Went to location to meet Gary Crowley (surface owner of well location) - he requested that someone from DOGM come look at pit to determine if it would satisfactorily contain drilling fluids			

- Arapaho Rig # 2 still setting up
- pit is dug in clay rich sandy soil
- pit already contains water
- pit looks good - the soil type & the gel & cuttings in the drilling mud (once they are mudded up) should effectively seal pit & contain drilling fluids

Form DOGC-4

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION
4241 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84114
533-5771

State Lease No. ____
Federal Lease No. ____
Indian Lease No. ____
Fee & Pat. X

REPORT OF OPERATIONS AND WELL STATUS REPORT

STATE UTAH COUNTY SAN JUAN FIELD/LEASE TXP #1-25 CROWLEY RANCH

The following is a correct report of operations and production (including drilling and producing wells) for the month of: March, 19 84.

Agent's Address TXP Operating Company
P. O. Box 1396
Houston, Texas 77251
Phone No. 713/439-3502

Company Transco Exploration Company
Signed Kay S. Morgan
Title Supervisor, Regulatory/Environmental Affairs

Sec. and ¼ of ¼	Twp.	Range	Well No.	Days Produced	Barrels of Oil	Gravity	Cu. Ft. of Gas (In thousands)	Gallons of Gasoline Recovered	Barrels of Water (if none, so state)	API NUMBER/REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NW¼NW¼ of SEC. 25	43S	25E	1-25	0	0	0	0	0	0	TD: 1320' MUD: 8.3 Set 14" conductor @ 101'. Spudded 3-29-84 @ 9:30 a.m. Drilled to 1320'.

TIGHT HOLE

APR 13 1984

GAS: (MCF)
Sold ____
Flared/Vented ____
Used On/Off Lease ____

OIL or CONDENSATE: (To be reported in Barrels)
On hand at beginning of month ____
Produced during month ____
Sold during month ____
Unavoidably lost ____
Reason: ____
On hand at end of month ____

DRILLING/PRODUCING WELLS: This report must be filed on or before the sixteenth day of the succeeding month following production for each well. Where a well is temporarily shut-in, a negative report must be filed. *THIS REPORT MUST BE FILED IN DUPLICATE.*

Note: The API number must be listed on each well.

Form DOGC-4

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION
4241 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84114
533-5771

State Lease No. .....
Federal Lease No. .....
Indian Lease No. .....
Fee & Pat. X

CONFIDENTIAL

REPORT OF OPERATIONS AND WELL STATUS REPORT

STATE UTAH COUNTY SAN JUAN FIELD/LEASE TXP #1-25 CROWLEY RANCH

The following is a correct report of operations and production (including drilling and producing wells) for the month of: APRIL, 19 84.

Agent's Address TXP Operating Company
P. O. Box 1396
HOUSTON, TEXAS 77251
Phone No. (713) 439-3502

Company TRANSCO EXPLORATION COMPANY
Signed Jay L. Morgan
Title Supervisor, Regulatory/Environmental Affairs

Sec. and ¼ of ¼	Twp.	Range	Well No.	Days Produced	Barrels of Oil	Gravity	Cu. Ft. of Gas (In thousands)	Gallons of Gasoline Recovered	Barrels of Water (if none, so state)	API NUMBER/REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NW¼NW¼ of SEC. 25	43S	25E	1-25	0	0	0	0	0	0	TD 5786' MUD 9.4 Drld & surveyed to 2100'. Ran & set 9-5/8" csg. @ 2100' w/905 sx cmt. NU & tested BOP's. Drld & surveyed to 4855' - lost returns. Spotted LCM. Drld to 5148' & ran DST #1. Drld & surveyed to 5597' - lost returns. Spotted LCM. Drld to 5663' - lost returns. Spotted LCM. Circ w/full returns. Drld to 5786' & ran DST #2 - unsuccessful. Ran DST #3. Circ & raised MW to 10# - lost returns. Attempted to squeeze LCM. Pumped polymer plug 4800-2976'. WIH & reamed to 4609' & CBU. Lost returns. Washed & reamed to 4701' & dropped out of polymer plug. Circ & raised MW. Set RTTS @ 2020' & established inj. rate - pumped 400 sx cmt to 3900'. GIH & tagged firm cmt. @ 3957'. Now drlg. cmt. API# 43-037-30978

RECEIVED
MAY 9 1984
DIVISION OF OIL GAS & MINING

MAY - 9 1984

GAS: (MCF)
Sold .....
Flared/Vented .....
Used On/Off Lease .....

OIL or CONDENSATE: (To be reported in Barrels)
On hand at beginning of month .....
Produced during month .....
Sold during month .....
Unavoidably lost .....
Reason: .....
On hand at end of month .....

DRILLING/PRODUCING WELLS: This report must be filed on or before the sixteenth day of the succeeding month following production for each well. Where a well is temporarily shut-in, a negative report must be filed. *THIS REPORT MUST BE FILED IN DUPLICATE.*

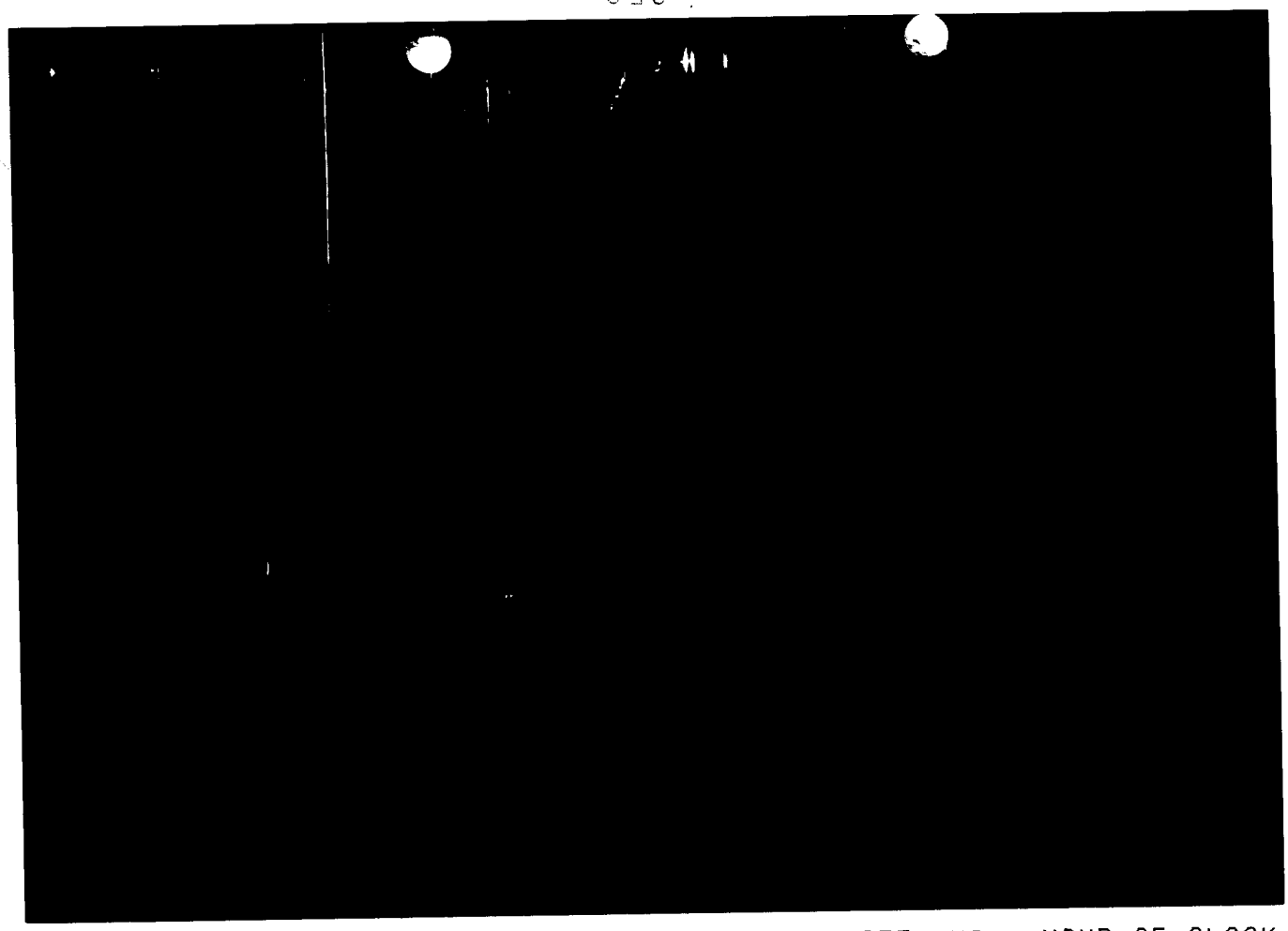
Note: The API number must be listed on each well.

CROWLEY RANCH	1.25	3	5698.' - 5786.'	TRANSCO EXPLORATION COMPANY	
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RNG. 25-34S-25E	FIELD AREA EASTLAND	COUNTY SAN JUAN	STATE UTAH	EG	

HALLIBURTON
SERVICES

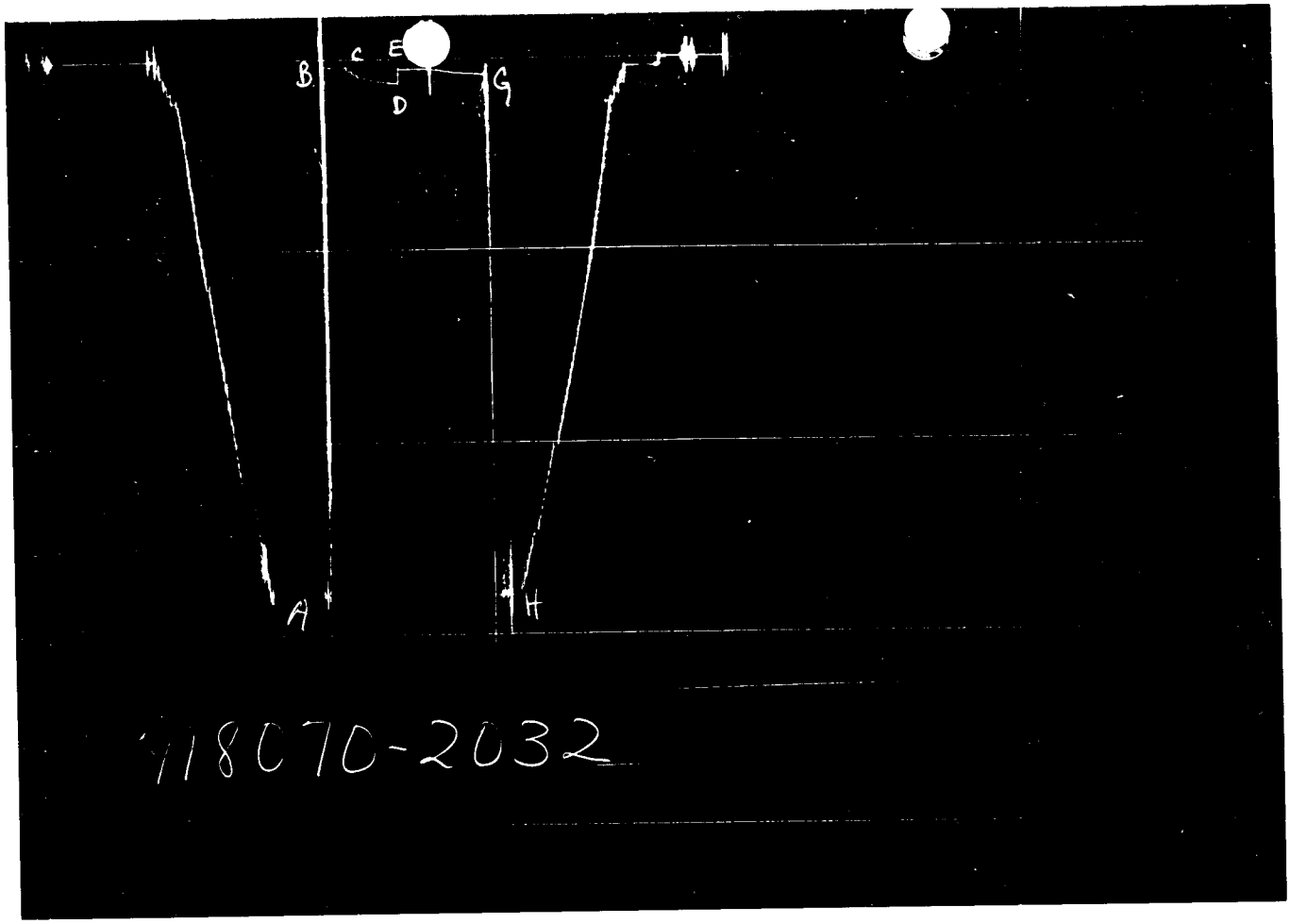
TICKET NO. 71807000
26-APR-84
FARMINGTON

FORMATION TESTING SERVICE REPORT

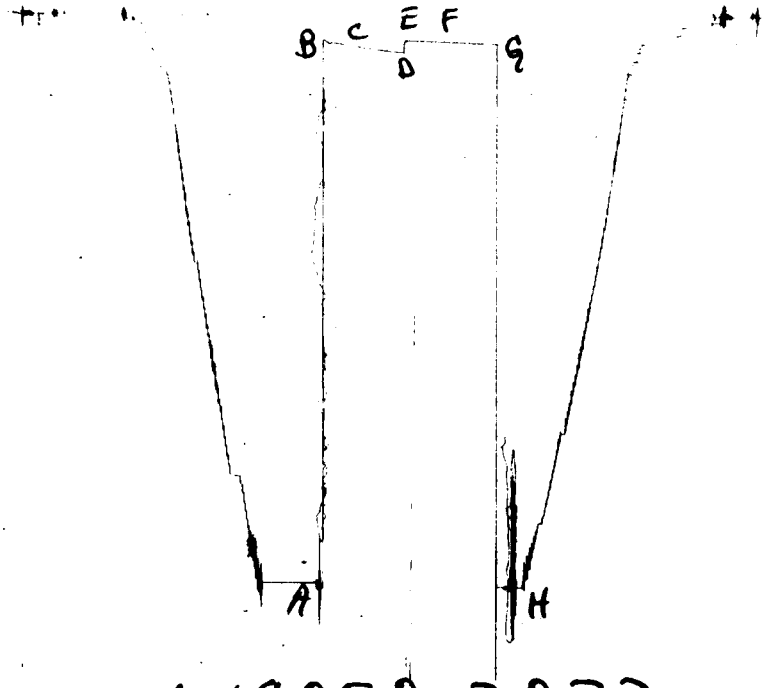


GAUGE NO: 2032 DEPTH: 5677.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2783	2769.4			
B	INITIAL FIRST FLOW	27	38.3	30.0	30.0	F
C	FINAL FIRST FLOW	40	40.5			
C	INITIAL FIRST CLOSED-IN	40	40.5	60.0	60.0	C
D	FINAL FIRST CLOSED-IN	120	127.3			
E	INITIAL SECOND FLOW	40	50.3	37.0	37.0	F
F	FINAL SECOND FLOW	40	53.3			
F	INITIAL SECOND CLOSED-IN	40	53.3	65.0	65.0	C
G	FINAL SECOND CLOSED-IN	80	82.9			
H	FINAL HYDROSTATIC	2783	2784.6			



118070-2032



718070-2033

GAUGE NO: 2033 DEPTH: 5784.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE REPORTED	PRESSURE CALCULATED	TIME REPORTED	TIME CALCULATED	TYPE
A	INITIAL HYDROSTATIC	2838	2819.0			
B	INITIAL FIRST FLOW	120	123.9	30.0	30.0	F
C	FINAL FIRST FLOW	134	149.2			
C	INITIAL FIRST CLOSED-IN	134	149.2	60.0	60.0	C
D	FINAL FIRST CLOSED-IN	187	185.3			
E	INITIAL SECOND FLOW	134	126.3	37.0	37.0	F
F	FINAL SECOND FLOW	134	130.7			
F	INITIAL SECOND CLOSED-IN	134	130.7	65.0	65.0	C
G	FINAL SECOND CLOSED-IN	147	141.6			
H	FINAL HYDROSTATIC	2838	2839.3			

EQUIPMENT & HOLE DATA

FORMATION TESTED: LOWER ISMAY
NET PAY (ft): 6.0
GROSS TESTED FOOTAGE: 87.8
ALL DEPTHS MEASURED FROM: KB
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 0
TOTAL DEPTH (ft): 5786.0
PACKER DEPTH(S) (ft): 5692, 5698
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.30
MUD VISCOSITY (sec): 41
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 130 @ 5783.0 ft

TICKET NUMBER: 71807000

DATE: 4-22-84 TEST NO: 3

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: FARMINGTON

TESTER: ROBINSON

WITNESS:

DRILLING CONTRACTOR: ARAPAHOE #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
MUD PITS	4.200 @ 63 °F	ppm
TOP RECOVERY	3.100 @ 68 °F	ppm
SAMPLER	2.820 @ 65 °F	ppm
BOTTOM RECOVERY	3.080 @ 68 °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE: 33
cu.ft. OF GAS: 0.01
cc OF OIL: 0
cc OF WATER: 0
cc OF MUD: 2450
TOTAL LIQUID cc: 2450

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

90' OF SLIGHTLY GAS AND OIL CUT MUD

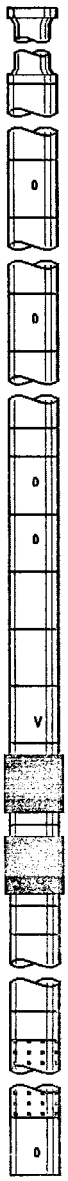
MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: .75" VARIABLE CHOKE | TICKET NO: 71807000

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
4-21-84					
2305					ON LOCATION, STANDING BY
4-22-84					
0205					PICKED UP TOOLS
0230					STOPPED TO REPAIR CHAIN ON
					DRAWWORKS
0340					PICKED UP TOOLS
0400					TRIPPED IN WITH DST #3
0710	BH				TOOL OPENED WITH A 1 1/2" BLOW
					IN BUBBLE BUCKET
0715	"				SAME BLOW
0720	"				SAME
0725	"				1" BLOW
0730	"				1/2" BLOW
0735	"				SAME
0740	"				1/4" BLOW, CLOSED TOOL
0840	"				OPENED TOOL WITH NO BLOW
0917	"				CLOSED TOOL WITH NO BLOW
1022					OPENED BY-PASS AND WORKED
					PACKERS LOOSE
1033					TRIPPED JARS
1035					TRIPPED OUT OF HOLE
1505					TOOLS OUT AND LAID DOWN.

TICKET NO. 71807000



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.000	3.340	5194.5	
3	DRILL COLLARS.....	6.000	2.250	291.6	
51	PUMP OUT REVERSING SUB.....	6.000	3.000	1.0	5486.0
3	DRILL COLLARS.....	6.000	2.250	87.7	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	5574.7
3	DRILL COLLARS.....	6.000	2.250	87.0	
5	CROSSOVER.....	5.750	3.000	1.0	
13	DUAL CIP SAMPLER.....	5.750	0.750	7.5	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5671.0
80	AP RUNNING CASE.....	5.000	2.250	4.1	5676.0
15	JAR.....	5.030	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.9	
70	OPEN HOLE PACKER.....	6.870	1.530	5.9	5692.3
70	OPEN HOLE PACKER.....	6.750	1.530	5.9	5698.2
5	CROSSOVER.....	5.750	3.000	1.0	
3	DRILL COLLARS.....	6.000	2.250	58.6	
5	CROSSOVER.....	5.750	2.500	1.0	
20	FLUSH JOINT ANCHOR.....	5.750	2.870	21.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.2	5783.0
	TOTAL DEPTH				5786.0

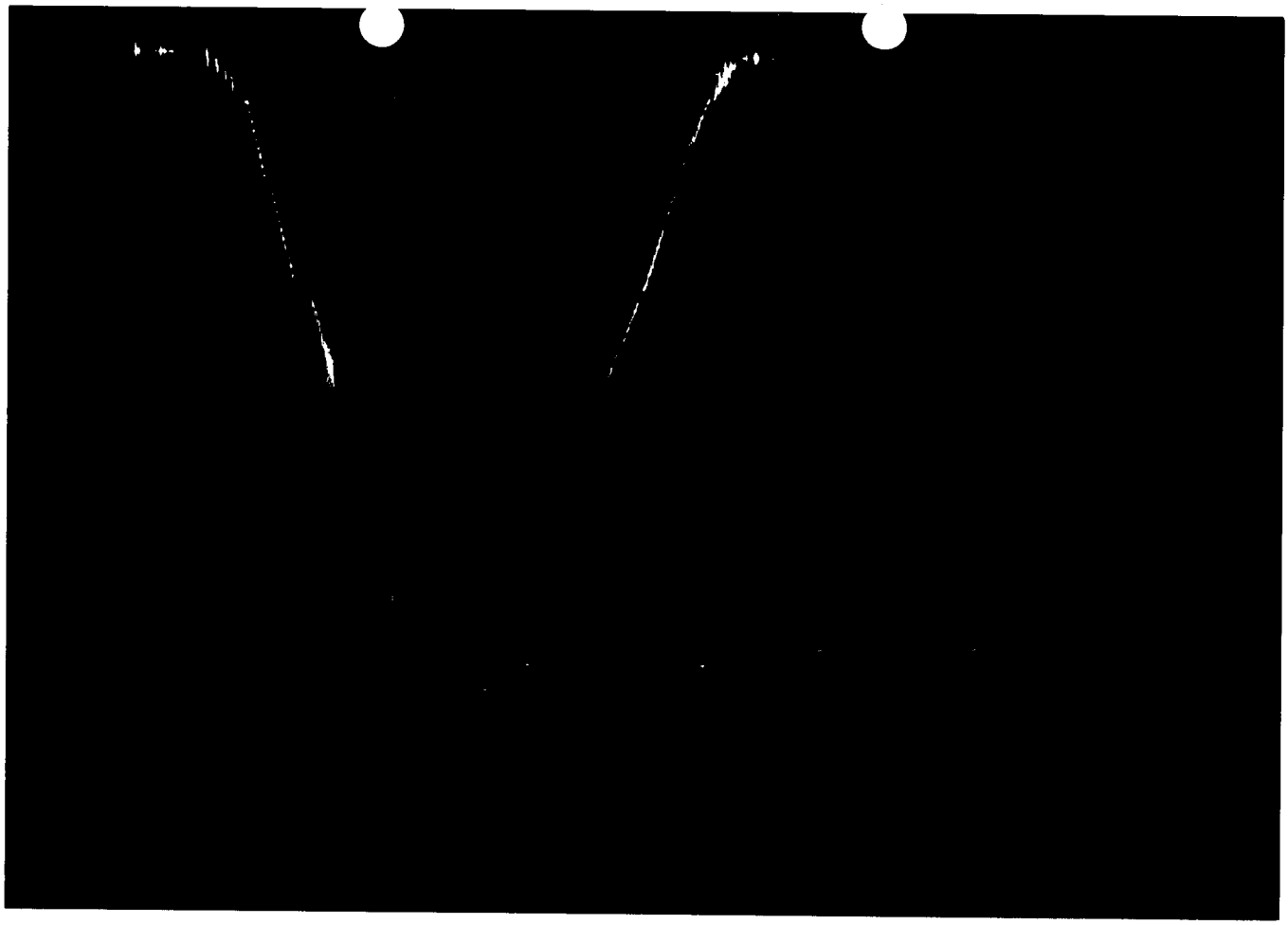
EQUIPMENT DATA

CROWLEY RANCH	1-25	2		TRANSCO EXPLORATION COMPANY	
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME	
LEGAL LOCATION SEC. - TWP. - RNG. 25 - 34 SOUTH - 25 EAST	FIELD AREA EASTLAND	COUNTY SAN JUAN	STATE UTAH	PW	

HALLIBURTON
SERVICES

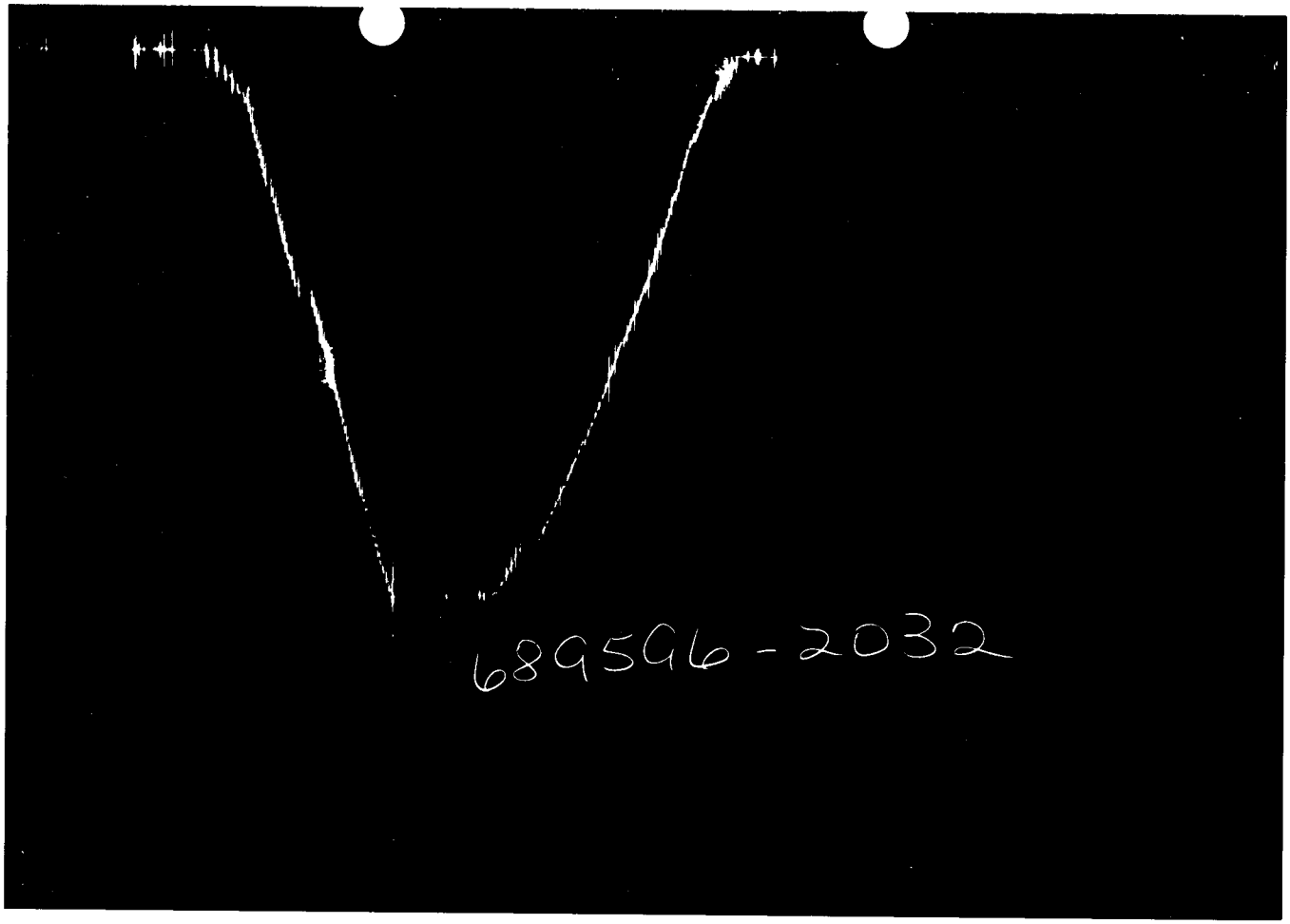
TICKET NO. 68959600
25-APR-84
FARMINGTON

FORMATION TESTING SERVICE REPORT



GAUGE NO: 2032 DEPTH: _____ BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	FAILED TO REACH BOTTOM					



GAUGE NO: [illegible] DEPTH: [illegible] BLANKED OFF: NO HOUR OF CLOCK: [illegible]

ID	DESCRIPTION	PRESSURE REPORTED	PRESSURE CALCULATED	TIME REPORTED	TIME CALCULATED	TYPE
[illegible]	[illegible]					

EQUIPMENT & HOLE DATA

FORMATION TESTED: LOWER ISMAY
NET PAY (ft):
GROSS TESTED FOOTAGE:
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 0
TOTAL DEPTH (ft): 5786.0
PACKER DEPTH(S) (ft):
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.40
MUD VISCOSITY (sec): 42
ESTIMATED HOLE TEMP. (°F): 130
ACTUAL HOLE TEMP. (°F): ___ @ _____ ft

TICKET NUMBER: 68959600

DATE: 4-21-84 TEST NO: 2

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: FARMINGTON

TESTER: D. GUNN

WITNESS:

DRILLING CONTRACTOR: ARAPAHOE #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ___ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

MEASURED FROM TESTER VALVE

REMARKS:

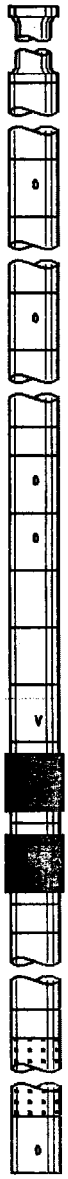
HIT A BRIDGE 30' OFF BOTTOM (COMPANY MAN DECIDED TO TRIP OUT OF HOLE AND CONDITION HOLE WITH BIT).

ATTEMPTED TO TEST FROM 5698' TO 5786'

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 68959600

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
4-20-84					
2340					ON LOCATION
4-21-84					
0230					PICKED-UP TOOLS
0420					TRIPPED IN HOLE WITH DST #2
0620					HIT A BRIDGE 30' OFF BOTTOM
0705					TRIP OUT OF HOLE WITH TEST
					TOOLS.

TICKET NO. 68959600



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.000	3.340		
3	DRILL COLLARS.....	6.000	2.250	291.6	
51	PUMP OUT REVERSING SUB.....	6.000	3.000	1.0	
3	DRILL COLLARS.....	6.000	2.250	87.7	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	
3	DRILL COLLARS.....	6.000	2.250	87.0	
5	CROSSOVER.....	5.750	3.000	1.0	
13	DUAL CIP SAMPLER.....	5.750	0.750	7.5	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	
80	AP RUNNING CASE.....	5.000	2.250	4.1	
15	JAR.....	5.030	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.9	
70	OPEN HOLE PACKER.....	6.750	1.530	5.9	
70	OPEN HOLE PACKER.....	6.750	1.530	5.9	
5	CROSSOVER.....	5.750	3.000	1.0	
3	DRILL COLLARS.....	6.000	2.250	58.6	
5	CROSSOVER.....	5.750	2.500	1.0	
20	FLUSH JOINT ANCHOR.....	5.750	2.870	21.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.2	
	TOTAL DEPTH				5786.0

EQUIPMENT DATA

LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
25, 34S, 25E	WILDCAT	SAN JUAN	UTAH SM

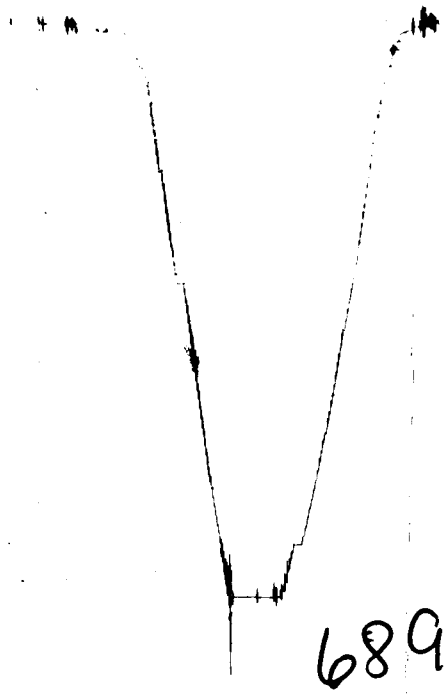
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
TXP COWLEY RANCH	1-25	1	5130.' - 5148.'	TRANSCO EXPLORATION COMPANY

HALLIBURTON
SERVICES

TICKET NO. 71804100
19-APR-84
FARMINGTON

RECEIVED
JUN 10 1985
DIVISION OF OIL
GAS & MINING

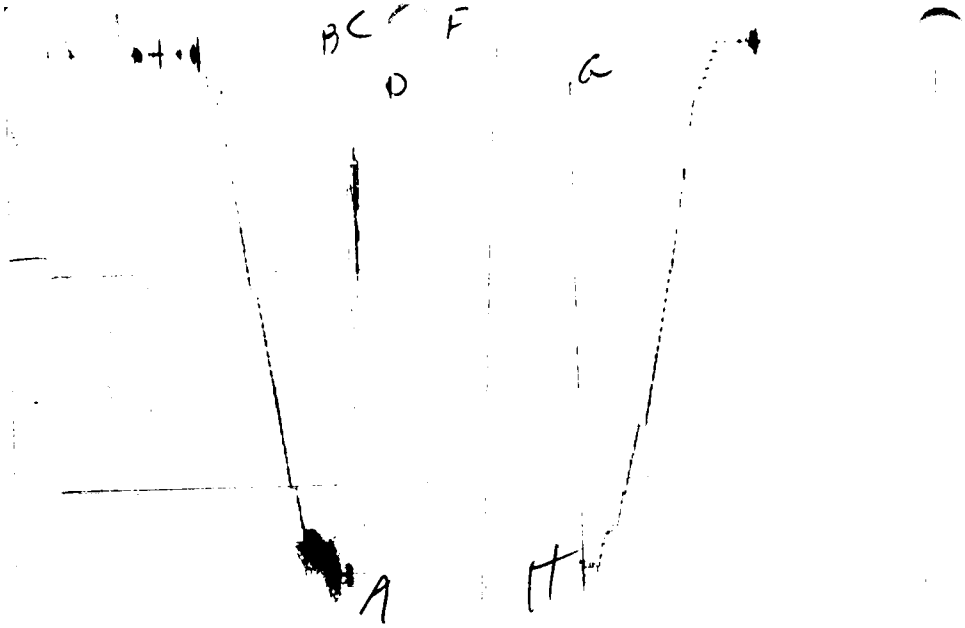
FORMATION TESTING SERVICE REPORT



689596-2033

GAUGE NO: 2033 DEPTH: _____ BLANKED OFF: YES HOUR OF CLOCK: 24

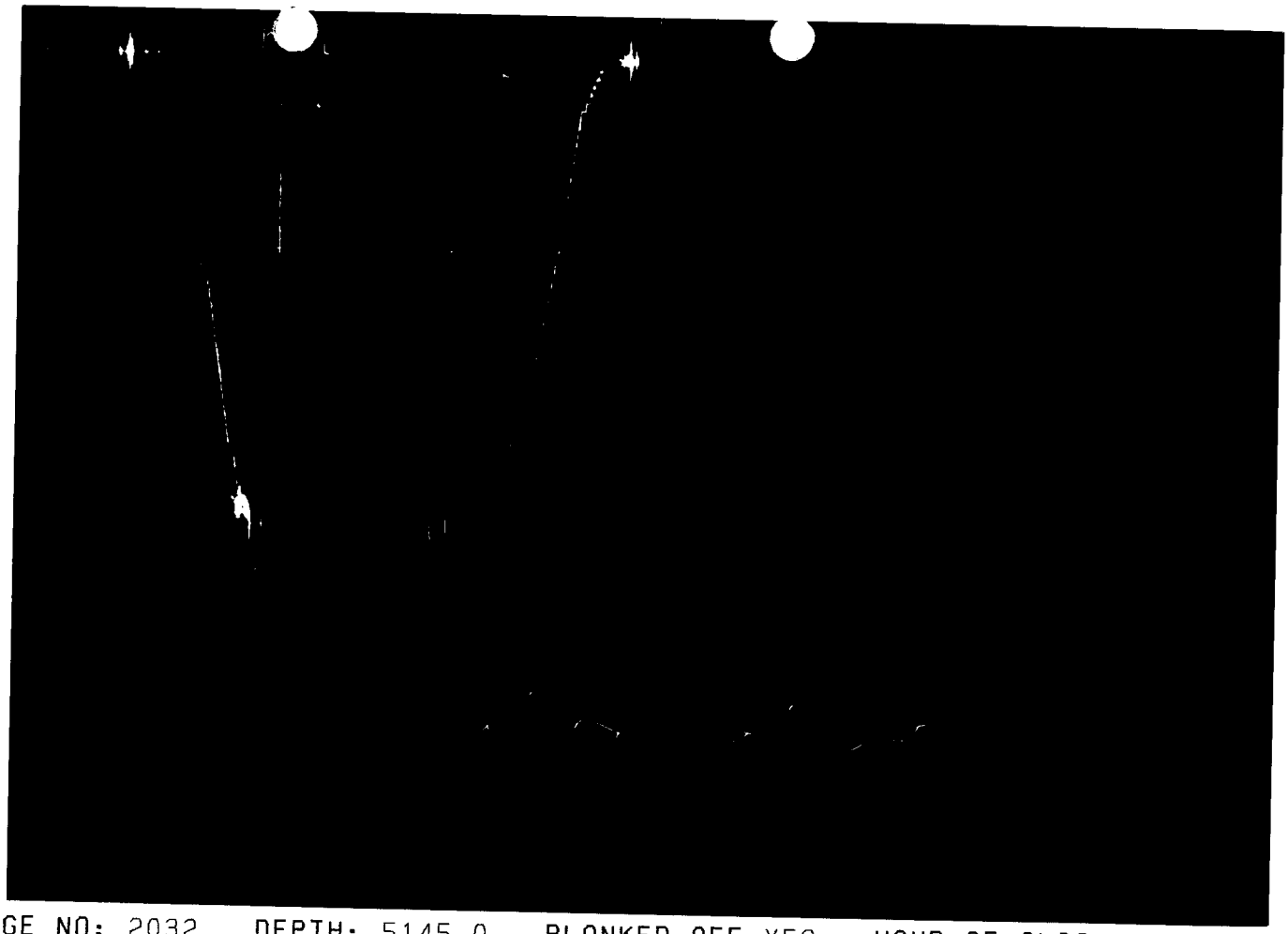
ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	FAILED TO REACH BOTTOM					



718041-2033

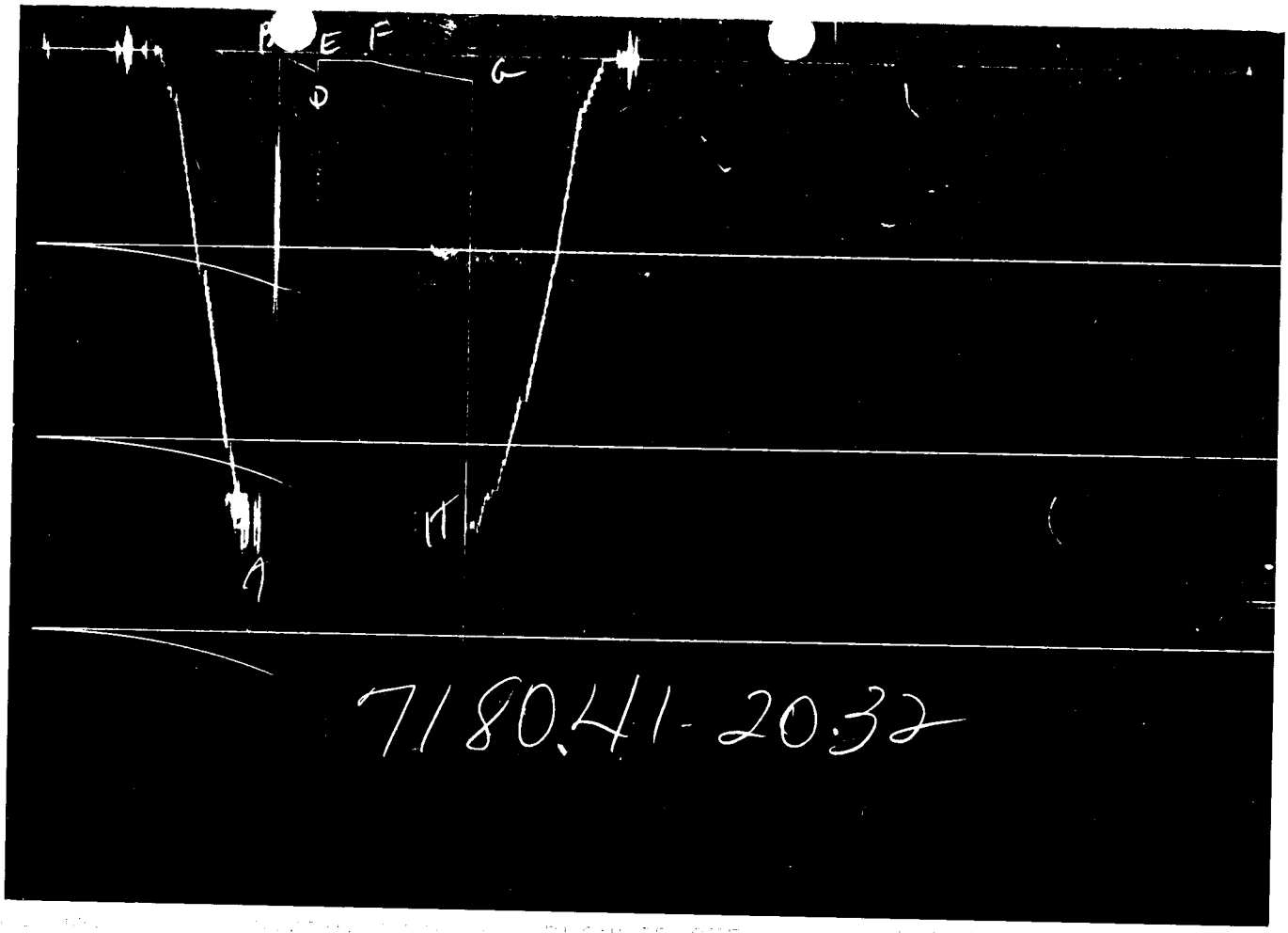
GAUGE NO: 2033 DEPTH: 5112.2 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2397	2418.8			
B	INITIAL FIRST FLOW	13	27.3	15.0	15.0	F
C	FINAL FIRST FLOW	13	12.8			
C	INITIAL FIRST CLOSED-IN	13	12.8	30.0	30.0	C
D	FINAL FIRST CLOSED-IN	80	78.5			
E	INITIAL SECOND FLOW	13	26.9	60.0	60.0	F
F	FINAL SECOND FLOW	13	16.2			
F	INITIAL SECOND CLOSED-IN	13	16.2	120.0	120.0	C
G	FINAL SECOND CLOSED-IN	107	107.6			
H	FINAL HYDROSTATIC	2397	2415.6			



GAUGE NO: 2032 DEPTH: 5145.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2411	2442.2			
B	INITIAL FIRST FLOW	27	37.9	15.0	15.0	F
C	FINAL FIRST FLOW	27	36.1			
C	INITIAL FIRST CLOSED-IN	27	36.1	30.0	30.0	C
D	FINAL FIRST CLOSED-IN	107	102.0			
E	INITIAL SECOND FLOW	27	39.3	60.0	60.0	F
F	FINAL SECOND FLOW	27	39.3			
F	INITIAL SECOND CLOSED-IN	27	39.3	120.0	120.0	C
G	FINAL SECOND CLOSED-IN	107	128.0			
H	FINAL HYDROSTATIC	2411	2441.0			


E F
D
G
A
H
7180.41-2032

EQUIPMENT & HOLE DATA

FORMATION TESTED: PARADOX
NET PAY (ft):
GROSS TESTED FOOTAGE: 18.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 7.875
ELEVATION (ft): 0
TOTAL DEPTH (ft): 5148.0
PACKER DEPTH(S) (ft): 5124, 5130
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.00
MUD VISCOSITY (sec): 38
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 118 @ 5148.0 ft

TICKET NUMBER: 71804100

DATE: 4-14-84 TEST NO: 1

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: FARMINGTON

TESTER: HOWARD BELL

WITNESS: GARY COCKRELL

DRILLING CONTRACTOR: ARAPAHOE #2

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
PIT	4.000 @ 67 °F	ppm
TOP	4.120 @ 70 °F	ppm
SAMPLER	4.700 @ 70 °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE: 80
cu.ft. OF GAS: 0.62
cc OF OIL: 0
cc OF WATER: 0
cc OF MUD: 2300
TOTAL LIQUID cc: 2300

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

10 FEET OF MUD

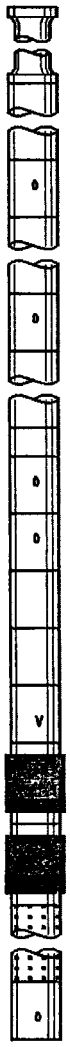
MEASURED FROM TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE: 3/4" ADJUSTABLE CHOKE | TICKET NO: 71804100

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
4-13-84					
2245					ON LOCATION, STOOD BY
4-14-84					
0030					PICKED UP TOOLS
0115					TRIPPED IN HOLE
0415	1/8"BH	0			ON BOTTOM, OPENED TOOL WITH A
					GOOD BLOW
0417	1/8"BH	7 OZ.			SAME
0420	1/8"BH	5 OZ.			SAME
0425	1/8"BH	3 OZ.			SAME
0430	1/8"BH	1 OZ.			CLOSED TOOL WITH WEAK BLOW
0500	1/8"BH	0			OPENED TOOL WITH WEAK BLOW,
					5" IN BUCKET
0505	1/8"BH	0			WEAK BLOW, 4" IN BUCKET
0510	1/8"BH	0			WEAK BLOW, 3" IN BUCKET
0515	1/8"BH	0			WEAK BLOW, 1" IN BUCKET
0530	1/8"BH	0			WEAK BLOW, 1/2" IN BUCKET
0545	1/8"BH	0			VERY WEAK BLOW AT TOP OF
					BUCKET.
0600	1/8"BH	0			NO BLOW, CLOSED TOOL
0800					OPENED BYPASS
0808					TRIPPED OUT OF HOLE
1130					TOOLS OUT OF HOLE AND LAID DOWN

TICKET NO. 71804100



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.000	3.340	4568.1	
3	DRILL COLLARS.....	6.250	2.250	352.2	
51	PUMP OUT REVERSING SUB.....	6.000	3.000	1.0	4921.3
3	DRILL COLLARS.....	6.250	2.250	86.8	
51	PUMP OUT REVERSING SUB.....	6.000	3.000	1.0	5009.0
3	DRILL COLLARS.....	6.000	2.250	86.1	
5	CROSSOVER.....	5.750	3.000	1.0	
13	DUAL CIP SAMPLER.....	5.000	0.870	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5108.1
80	AP RUNNING CASE.....	5.000	2.250	4.1	5112.2
15	JAR.....	5.030	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	2.8	
70	OPEN HOLE PACKER.....	6.750	1.530	5.9	5124.0
70	OPEN HOLE PACKER.....	6.750	1.530	5.9	5130.0
20	FLUSH JOINT ANCHOR.....	5.750	2.870	12.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.2	5145.0
	TOTAL DEPTH				5148.0

EQUIPMENT DATA

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER

2. NAME OF OPERATOR: TXP OPERATING COMPANY ATTN: KAY L. MORGAN

3. ADDRESS OF OPERATOR: P. O. BOX 1396, HOUSTON, TEXAS 77251

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 660' FWL & 660' FNL OF SEC. 25 (NW¼NW¼)

5. LEASE DESIGNATION AND SERIAL NO.: FEE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: --

7. UNIT AGREEMENT NAME: --

8. FARM OR LEASE NAME: TXPOC CROWLEY RANCH

9. WELL NO.: 1-25

10. FIELD AND POOL, OR WILDCAT: WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEC. 25, T34S, R25E

12. COUNTY OR PARISH: SAN JUAN

13. STATE: UTAH

14. PERMIT NO. API. NO. 43-037-30978

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 6893.7' (Ungraded)

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Add 7" csg to program			☐
(Other)	☐			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

STATUS: DEPTH: 5786' MUD WT: 9.0

Set 14" conductor casing @ 101'.
Set 9-5/8" csg (36#, K-55 LT&C) @ 2100 w/900 sx cmt.

*PROCEDURE: Set 7" csg (P110-FL 48) @ 5777 w/75 sx cmt. (Was not on original permit)

*Due to lost circulation problems, the 7" casing was set. We will still drill to our permitted TD of 6000' and run 5-1/2" csg, if productive.

RON FIRTH WAS NOTIFIED BY KAY MORGAN OF 7" CSG ON 5-10-84.

RECEIVED
MAY 14 1984
DIVISION OF OIL GAS & MINING

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

By: Transco Exploration Company, Managing General Partne

SIGNED [signature] TITLE Drilling Superintendent DATE 05-11-84

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form DOGC-4

RECEIVED

JUN 19 1984

DIVISION OF OIL GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION
4241 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84114
533-5771

State Lease No. ____
Federal Lease No. ____
Indian Lease No. ____
Fee & Pat. X

REPORT OF OPERATIONS AND WELL STATUS REPORT

STATE UTAH COUNTY SAN JUAN FIELD/LEASE TXP #1-25 CROWLEY RANCH

The following is a correct report of operations and production (including drilling and producing wells) for the month of: MAY, 19 84.

Agent's Address TXP OPERATING COMPANY
P. O. Box 1396
HOUSTON, TEXAS 77251
Phone No. (713) 439-3503

Company TRANSCO EXPLORATION CO., Managing Gen Ptnr
Signed Kay L. Morgan
Title Supervisor, Regulatory/Environmental Affairs

Sec. and ¼ of ¼	Twp.	Range	Well No.	Days Produced	Barrels of Oil	Gravity	Cu. Ft. of Gas (In thousands)	Gallons of Gasoline Recovered	Barrels of Water (if none, so state)	API NUMBER/REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NW¼NW¼ of SEC. 25	43S	25E	1-25	0	0	0	0	0	0	TD: 5953' MUD: 9.9 Drld cmt. to 5786' & lost returns. Displaced 600 sx thickset cmt. Drld cmt. Logged hole. Ran 7" csg @ 5777' & cmtd w/75 sx cmt. Drld to 5886'. Logged & cored. Set 20 sx cmt. plug 5827-5710'. Cut 7" csg @ 3216' & POOH. Pumped reserve pit. Set 27 sx cmt plug 3236-3136', & 35 sx plug 2150-2050'. Cut wellhead & spotted 10 sx @ surface. Well was plugged & abandoned on 5-21-84. FINAL REPORT. DBM 6/15/84 API # 43-037-30978 JUN 19 1984

GAS: (MCF)
Sold ____
Flared/Vented ____
Used On/Off Lease ____

OIL or CONDENSATE: (To be reported in Barrels)
On hand at beginning of month ____
Produced during month ____
Sold during month ____
Unavoidably lost ____
Reason: ____
On hand at end of month ____

DRILLING/PRODUCING WELLS: This report must be filed on or before the sixteenth day of the succeeding month following production for each well. Where a well is temporarily shut-in, a negative report must be filed. *THIS REPORT MUST BE FILED IN DUPLICATE.*

Note: The API number must be listed on each well.

ARAPAHOE DRILLING CO., INC.
P. O. BOX 26687
ALBUQUERQUE, NEW MEXICO 87125

STEVE SCHALK
PRESIDENT

RECEIVED
MAY 31 1984
SUPERINTENDENT
TXC DRILLING DEPT.

May 23, 1984

DEVIATION RECORD

TXPOC #1-25 Crowley Ranch
San Juan County, Utah

DATE	DEPTH	DEVIATION
3-29-84	500'	3/4°
3-30-84	940'	3/4°
3-30-84	1038'	3/4°
3-31-84	1252'	1°
4-01-84	1749'	1°
4-04-84	2100'	2-1/2°
4-04-84	2244'	2-1/4°
4-05-84	2679'	1-1/4°
4-05-84	2866'	3/4°
4-07-84	3360'	1-1/4°
4-07-84	3462'	3/4°
4-09-84	3960'	3/4°
4-10-84	4516'	3/4°
4-10-84	4562'	3/4°
4-13-84	5148'	1-1/2°
4-21-84	5785'	1/4°

ARAPAHOE DRILLING CO., INC.

Steve Schalk
President

STATE OF NEW MEXICO
COUNTY OF BERNALLIO

Subscribed and sworn to before me, a Notary Public, this 23rd day of May, 1984, by Steve Schalk.

OFFICIAL SEAL
LOIS CUNNINGHAM
NOTARY PUBLIC - NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires: 3/7/87

Lois Cunningham
Notary Public

GEARHART THE GO COMPANY

PRINT DISTRIBUTION FORM

Company: Transco Ex. P. O., Well TXPOC, CROWLEY RNCH Field WC

Location 25-34S-25E County San Juan State Utah

District GRAND JUNCTION Engineer GEGG S.O. No. 6-4-84 (Important)

Log Type CDL/CNS, DLL, DIL
BCS, FED, DIP,
WEL,

IMPORTANT

Check One of the Following

- Final Run ..... ☒
- Hole For Another Run ..... ☐
- Another Run Questionable ..... ☐
- Customer Should Be Contacted

Mail Film To Transco Ex. Co.
One United Bank Center
1700 Lincoln, Suite 2100
Denver, CO 80203

Customer's Agent

Sepia Transparency Prints Requested	Number of Final Prints Requested	Mail To (Name and Address)
1	2	Transco Exploration Co. One United Bank Center 1700 Lincoln , Suite 2100 Denver, CO 80203 Attn: Bruce Wiley
	3	Transco Exploration P.O. Box 1369 2800 Post Oak Blvd. Houston, TX 77251 Attn: Dave Adams, Lanny Dunham, Dave Adams
	1	State of Utah - Div. Oil & Gas 4241 Slate Office Bldg. Salt Lake City, UT 84114 Confidencial
1	3	R.M. COFFELT - Phillips OIl 8055 E. Tufts Ave. Pkwy Denver , CO 80237
	2	Raymond T. Duncan Oil Properties Colorado Cntr., Penthouse One 1777 S. Harrison St. Denver, CO 80210 Attn: Mr. Don Lehman
	2	Clair R. Gorman 4209 St. Andrew's Midland, TX 79707
1	1	Jerry Chambers Expl 7800 E. Union Ave. Suite 1100 Denver, CO 80237
	2	Tenneco Oil Co. 6162 S. Willow Dr. ENglewood, CO 80112 Attn: Mick Hartsell
	2	William R. Thurston P.O.Box 2080 Durango, CO 81301

DISTRIBUTION: *White Copy*, Print Center • *Yellow Copy*, Customer • *Pink Copy*, District File

Form OGC-1b

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER

2. NAME OF OPERATOR: TXP OPERATING COMPANY ATTN: KAY L. MORGAN

3. ADDRESS OF OPERATOR: P. O. BOX 1396, HOUSTON, TEXAS 77251

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 660' FWL & 660' FNL OF SEC. 25 (NW¼NW¼)

5. LEASE DESIGNATION AND SERIAL NO.: FEE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

7. UNIT AGREEMENT NAME: ---

8. FARM OR LEASE NAME: TXPOC-CROWLEY RANCH

9. WELL NO.: #1-25

10. FIELD AND POOL, OR WILDCAT: WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEC. 25, T34S, R25E

14. PERMIT NO. API NO. 43-037-30978

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 6893.7' (Ungraded)

12. COUNTY OR PARISH: SAN JUAN

13. STATE: UTAH

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	XX	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	XX
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

RECEIVED
JUN 6 1984
DIVISION OF OIL GAS & MINING

STATUS: TD: 5953' MUD WT: 10.0

Set 14" conductor casing @ 101'.
Set 9-5/8" csg (36#, K-55 LT&C) @ 2100 w/900 sx cmt.
Set 7" csg (P-110 FL 48) @ 5777 w/75 sx cmt.

P&A PROCEDURE:

Set plug from 5827-5710' w/20 sx cmt. Cut 7" csg @ 3216' & pulled out of hole. Pumped reserve pit away. VERBAL APPROVAL GRANTED BY RON FIRTH/RUSSEL MCPHAIL ON 5/18/84.

Set plug from 3136-3236' w/27 sx cmt.; set plug from 2150-2050' w/35 sx cmt.; Cut wellhead and spot 10 sx cmt @ surface. Released rig 0800 on 5-21-84. VERBAL APPROVAL GRANTED BY RON FIRTH/RUSSELL MCPHAIL AGAIN ON 05-20-84.

LOCATION IS CURRENTLY BEING CLEANED AND RESTORED.

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

SIGNED 6/1/84 TITLE Drilling Superintendent DATE 06-01-84.

~~TRANSCO Exploration Company~~
Managing General Partner

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Clarence L. Harr
Consulting Petroleum Geologist

RECEIVED
JUN 11 1984
DIVISION OF OIL
GAS & MINING

TRANSCO EXPLORATION PARTNERS

OPERATING COMPANY

Denver, Colorado

CONFIDENTIAL

CONFIDENTIAL

WELL REPORT

TXPOC, Crowley Ranch No. 1-25

NW NW NW 25-T34S-R25E

San Juan County, Utah

May 21, 1984

by

CLARENCE L. HARR

CONSULTING PETROLEUM GEOLOGIST

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL SUMMARY

OPERATOR:	TRANSCO EXPLORATION PARTNERS OPERATING COMPANY
WELL NAME:	TXPOC, CROWLEY RANCH NO. 1-25
LOCATION:	660' FNL - 660' FWL NW NW NW SEC. 25, T. 34S., R. 25E. SAN JUAN COUNTY, UTAH
AREA:	TRAVEST PROSPECT
OBJECTIVES:	LOWER DESERT CREEK; LOWER ISMAY; UPPER ISMAY
TOTAL DEPTH:	5953 DRILLER: 5953 LOGGER (PARADOX SALT)
ELEVATION:	K.B. 6906 G.L. 6893
SPUD DATE:	9:30 A.M. MARCH 29, 1984
DATE LOGGED:	1st RUN - 5/7/84; 2nd RUN - 5/15/84
STATUS:	PLUGGED & ABANDONED
DRILLING MEDIUM:	WATER TO 3700; FRESH GEL TO T.D.
HOLE SIZE:	12 1/4" TO 2100; 7 7/8" TO 5786; 6" TO T.D.
CASING SIZE:	13 3/8" @ 100; 9 5/8" @ 2100; 7" @ 5777
PERFORATIONS:	
TYPE LOGS:	DIL, DLL-MSFL, MEL, CD-CNL w. GR-CALIPER, SONIC w. GR-CALIPER (GR TO SURFACE) 2100 - T.D., DIPMETER 5365 - T.D.
TRANSCO DRILLING FOREMAN:	RUSSELL McPHAIL & GARY COCKRELL
CONSULTING GEOLOGIST:	CLARENCE L. HARR
MUD LOGGING CO:	TOOKE ENGINEERING
LOGGERS:	JOE RUNGE; HARRY CARPENTER; JUSTIN ARO
ELECTRIC LOGGING CO:	GEARHART, GRAND JUNCTION, CO
LOGGING ENGINEER:	JOHN GEGG
DRILLING CONTRACTOR:	ARAPAHOE (RIG 2), FARMINGTON, NM
MUD COMPANY:	NEWPARK DRILLING FLUIDS, FARMINGTON, NM

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL ANALYSIS SUMMARY

The Transco Crowley Ranch No. 1-25 was located in the northern portion of the Blanding Basin, which is in the southwestern portion of the greater Paradox Basin. It was drilled as an exploratory well to test the productive potential of the Pennsylvanian Paradox Lower Desert Creek dolomite. Potential zones in the Lower Ismay, Upper Ismay, and Lower Honaker Trail (Paradox) were considered as secondary objectives.

Lithologic description of the rock section penetrated by the subject well is based on 30-foot samples caught between the depth of 2100 to 2710 feet, and 10-foot samples from 2710 feet to the total depth of 5953 feet. The hole was drilled with water to 3700 feet, mudded-up with fresh non-dispersed gel mud and drilled to total depth. Drilling operations were encumbered by extreme lost circulation problems encountered when attempting to weight-up the mud system for a possible over-pressured zone in the Lower Desert Creek. Sands of the Cutler and Honaker Trail formations would not hold mud weights above 9.7 lbs. per gal. One polymer and two cement squeezes were attempted, but were not effective. A 7" casing was set at 5777 to shut off all lost circulation zones. Samples were very poor to fair quality, depending on the mud system conditions down to 7" casing point. Samples were excellent from 5786 to total depth.

Sample descriptions contained in the report are based on percentages of rock types from the footage interval logged upward as based on the carbide lag time indicated on the Tooke mud-gas log. The attached strip log is an interpretive lithologic log based on the samples and drilling time.

Structure: Structurally, the well came in 18 feet low to the prognosis in comparison of the Lower Desert Creek tops. The Transco Crowley Ranch No. 1-25 is 35 feet high to the Phillips No. 1-A Travest (24-34S-25E), a dry hole 3/4 mile NE, and only 4 feet low to the Western Natural Gas-Southern Union No. 1 Redd (23-34S-25E), 2/3 mile NW on the Lower Desert Creek.

Reservoir Evaluation

Cutler (2817-4423)

The Cutler formation consisted of 1608 feet of red-brown calcareous shale and siltstone and sandstones ranging in grain size from very fine to coarse with fair to poor sorting. The medium to coarse grained sands were predominately quartz, subangular to subrounded, and exhibited porosities up to 20% to 22%, maximum thickness was 25 feet. Numerous sands did contain clay (kaolin) void filler, reducing the effective porosity. Water saturations were not considered due to the injected polymer and cement from three seperate squeezes. The radioactive contamination of the sand reservoirs in both the Cutler and Honaker Trail is due to a radioactive tracer used in the cement. There were no mud-gas shows encountered during penetration of the Cutler.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

Honaker Trail (4423-5577)

The upper half of the unit (4423-5030) was a series of interbedded red-brown, gray-brown to black shale, tan, light gray to dark gray-brown, argillaceous, cryptocrystalline, dense limestone and fine to medium grained, angular to subrounded quartz sandstone. Certain sands were plugged with kaolinitic clay and calcareous cement; others, although somewhat clayey, exhibited good porosity (20-23%). Maximum sand thickness was 12 feet. The sands exhibited no stain, oil fluorescence or cut. The best mud-gas show (which was minimal) was a 28 Unit total gas increase, containing only C_1-C_2, at 4798-4800. The density-neutron cross-over through this interval is due entirely to the rugose hole from 4765-4870. Effect of the polymer squeeze is unknown. The sand is considered as water wet with only minor amounts of residual gas.

The interval from 5030 to 5577 (Ismay) is considered as the Paradox portion of the Honaker Trail. It consists predominately of light gray to dark gray-brown, microcrystalline to sucrosic, some chalky, argillaceous limestone, which is interbedded with dark gray-brown to black calcareous shale. The limestones show a marked increase of fossils, oolites and pellets from those in the upper portion of the Honaker Trail. Valid mud-gas shows were encountered during penetration, however, the section was devoid of reservoir quality rock.

Honaker Trail Sandstone (4711-18 & 4729-37) - Zone 1

Zone 1 sands were considered for calculation simply because they did not appear to be contaminated by the polymer or cement squeezes. Both sands were white to clear, medium to coarse grained, and appeared to have at least fair porosity. The samples contained abundant white kaolinitic clay which, undoubtedly, was washed from the grains, suggesting an actual reduced effective porosity. The density log reads kaolinite similar to sandstone, necessitating a Vsh correction. The x-plot porosities corrected back to 13% porosity or less. Based on an Rw of .07, the Sw for both sands calculated at 100%.

Honaker Trail (Paradox) Limestone (5134-5140) - Zone 2

A 4 foot drilling break was encountered at 5136-5140 feet. There was a corresponding total gas increase of 195 Units containing C_1-C_4 gasses. The limestone was dark gray-brown, brown, tan to cream, microcrystalline, sucrosic to finely crystalline, with some very oolitic. There was fair intercrystalline with a trace of oomoldic porosity. It was considered an oolitic packstone with the mud matrix recrystallized. There was no visible stain or fluorescence, however, crushed chips gave a pale-yellow residual cut. Zone 2 was tested on DST No. 1, 5130-48. Only 10 feet of mud with a rainbow of oil was recovered. Relative flow and shut-in pressures indicate the zone as tight. Based on a x-plot porosity of 8%, an Rw of .04 and a probable erroneous Rt of 175 ohms, the Sw calculated out at 19%. The zone contains hydrocarbon, but is thin, impermeable and is not capable of production.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

Honaker Trail (Paradox) Limestone (5230-5242) - Zone 3

The porosity logs show a 12-foot zone (5230-42) which, based on an Rt of 85 ohms, an Rw of .04, and porosity of 7%, calculates out at 30% Sw. There was no stain, fluroescence, or cut in the samples and no increase in mud-gas during penetration or drilling break. The cuttings were dark gray-brown, buff, microcrystalline to slightly chalky, argillaceous, dense limestone. The zone has a Vsh of 25 to 30%, which corrects the porosity downward to an ineffective 2 to 3% and increases the Sw to 100%. Zone 3 is considered tight and devoid of hydrocarbon.

Upper Ismay Limestone (5577-5644)

There was no indication of carbonate bank build-up within the Upper Ismay; however, there were two porous zones with moderate to fair mud-gas shows. The unit consisted of 67 feet of light gray to dark gray-brown, white to buff microcrystalline to finely crystalline, sucrosic to chalky limestone. There were thin zones of fossilferous, oolitic to pelletal limestone with some associated porosity. The unit was capped with a 4-foot anhydrite.

Upper Ismay Limestone (5610-5629) - Zone 4

Three feet of porosity was encountered from 5610-5613, which carried a mud-gas increase of 134 Units total gas with C_1-C_4. The gas show came from poor intercrystalline to sucrosic porosity developed in a gray to buff, microcrystalline to finely crystalline pelletal limestone. It was mud supported with greater than 10% grains, making it a wackestone. Based on a Vsh corrected porosity of 4.8%, an Rt of 36 ohms, and an Rw of .04, the Sw calculated at 69%. The zone is thin, tight, and wet.

A 100 Unit total gas increase with methane through butane was encountered coincident with the 5621-5629 porous zone. The limestone was white to cream, light brown, chalky to finely sucrosic and partly microcrystalline. It was slightly fossilferous and pelletal. St exhibited only poor intergranular porosity. There was dead oil, but no stain, oil fluorescence or cut. The zone is considered as having minimal effective porosity and relatively high water saturations. It is incapable of producing.

Lower Ismay (5710-5768) Zone 5

A 240 unit total gas increase was encountered in the top of the Lower Ismay during penetration. Logs indicate only thin streaks of porosity ranging between 3 and 1%. The limestone is gray, buff, dark gray-brown to tan, microcrystalline, some finely sucrosic to finely crystalline, locally fossilferous and pelletal. The rock is a mudstone locally grading to wackestone. There were traces of interparticle, vuggy and channel porosity with poor intergranular and intercrystalline porosity. DST No. 3 over the subject interval recovered only 90 feet of slightly gas and oil cut mud. The low pressures indicate a total lack of permeability which was not evident in the rock. The Lower Ismay is tight and nonproductive.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

Upper Desert Creek (5830-5884)

There was no evidence of porosity development in the Upper Desert Creek. The total unit is 54 feet thick. The upper anhydrite is 14 feet thick and the lower is 6 feet thick. The only significant mud-gas shows were associated to shales.

Lower Desert Creek (5884-5904)

Core No. 1 from 5866 to 5915.5 penetrated from the middle of the Upper Desert Creek shale to the lower portion of the Chimney Rock shale. The Lower Desert Creek starting at the base of the anhydrite included: 3.5 feet of shale, brownish-black, carbonaceous, calcareous to very dolomitic; 2 feet of dolomite, brownish-black, microcrystalline, very argillaceous, with anhydrite filled vugs and fractures, there was spotted bleeding oil stain, faint dull brown fluorescence and dead oil on selected fractures; 1 foot of dolomite identical to the above, but exhibiting fewer fractures, vugs, and less bleeding stain; 2 feet of dolomite, dark gray-brown, microcrystalline, very argillaceous and dense; 2 feet of black shale; 8 feet of dolomite brownish-black microcrystalline, very argillaceous, grades to a dolomitic shale (Chimney Rock) at base. The depositional texture was obviously mud-supported with less than 10 percent grains defining it as a mudstone. There was no visible indication of a "fossil-hash" zone or carbonate-bank build-up. Core porosities ranged from 1.2% to 4.4% through the 5 feet of objective dolomite.

Grain densities of core recovered dolomite ranged from 2.82 to 2.70, undoubtedly due to the argillaceous content. Log porosities based on a 2.87 density would be high.

CONFIDENTIAL

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

FORMATION TOPS

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
TXPOC Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

KB 6906

FORMATION	SAMPLE	"E" LOG	DATUM
Morrison		265	+ 6641
Chinle	2034	2033	+ 4873
Shinarump	2628	2616	+ 4290
Moenkopi	2716	2718	+ 4188
Cutler	2808	2817	+ 4089
Honaker Trail	4414	4423	+ 2483
Paradox	5018	5030	+ 1876
Paradox "A"	5446	5419	+ 1487
Boundary Butte	5540	5548	+ 1358
Upper Ismay	5578	5577	+ 1329
Hovenweep	5650	5644	+ 1262
Lower Ismay	5706	5710	+ 1196
Gothic	5766	5768	+ 1138
Upper Desert Creek	5830	5830	+ 1076
Lower Desert Creek	5883	5884	+ 1022
Chimney Rock	5902	5904	+ 1002
Abah	5922	5918	+ 988
Paradox Salt	5950 (D.B.)		+ 956
Total Depth	5953 Driller & Logger		

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

OFFSET WELL DATUMS for STRUCTURAL COMPARISON

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
TXPOC Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

FORMATION	TRANSCO No. 1-25 25-34S-25E KB 6906	PHILLIPS No. 1-A 24-34S-25E KB 6837	W.NAT.-S.U. No. 1 Redd 23-34S-25E KB 6852
Morrison	265 + 6641	267 + 6570	193 + 6659
Chinle	2033 + 4873	1982 + 4855	1966 + 4886
Cutler	2817 + 4089	2726 + 4111	2733 + 4119
Honaker Trail	4423 + 2483	4352 + 2485	4360 + 2492
Paradox "A"	5419 + 1487	5390 + 1447	5341 + 1511
Upper Ismay	5577 + 1329	5530 + 1307	5515 + 1337
Upper Desert Creek	5830 + 1076	5793 + 1044	5770 + 1082
Lower Desert Creek	5884 + 1022	5850 + 987	5826 + 1026
Chimney Rock	5904 + 1002	5871 + 966	5846 + 1006
Salt	5950 + 956	5914 + 923	5890 + 962
Total Depth	5933		

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

RESERVOIR EVALUATION

COMPANY TRANSCO
WELL TXPOC, Crowley Ranch No. 1-25
LOC. 25-34S-25E

FORMATION Honaker Trail ZONE NO. 1
ZONE INTERVAL 4711 - 4737 (Includes two sands)

ZONE ANALYSIS

"E" LOG DEPTHS		POROSITY D	N	S	X-PLOT	RT	%SW
					Vsh cor.	Rw =	.07
Top	4711						
7'	4714	Vsh = .52			.13	3	100
Base	4718						
Top	4729						
8'	4735	Vsh = .54			.123	2.6	100
Base	4737						

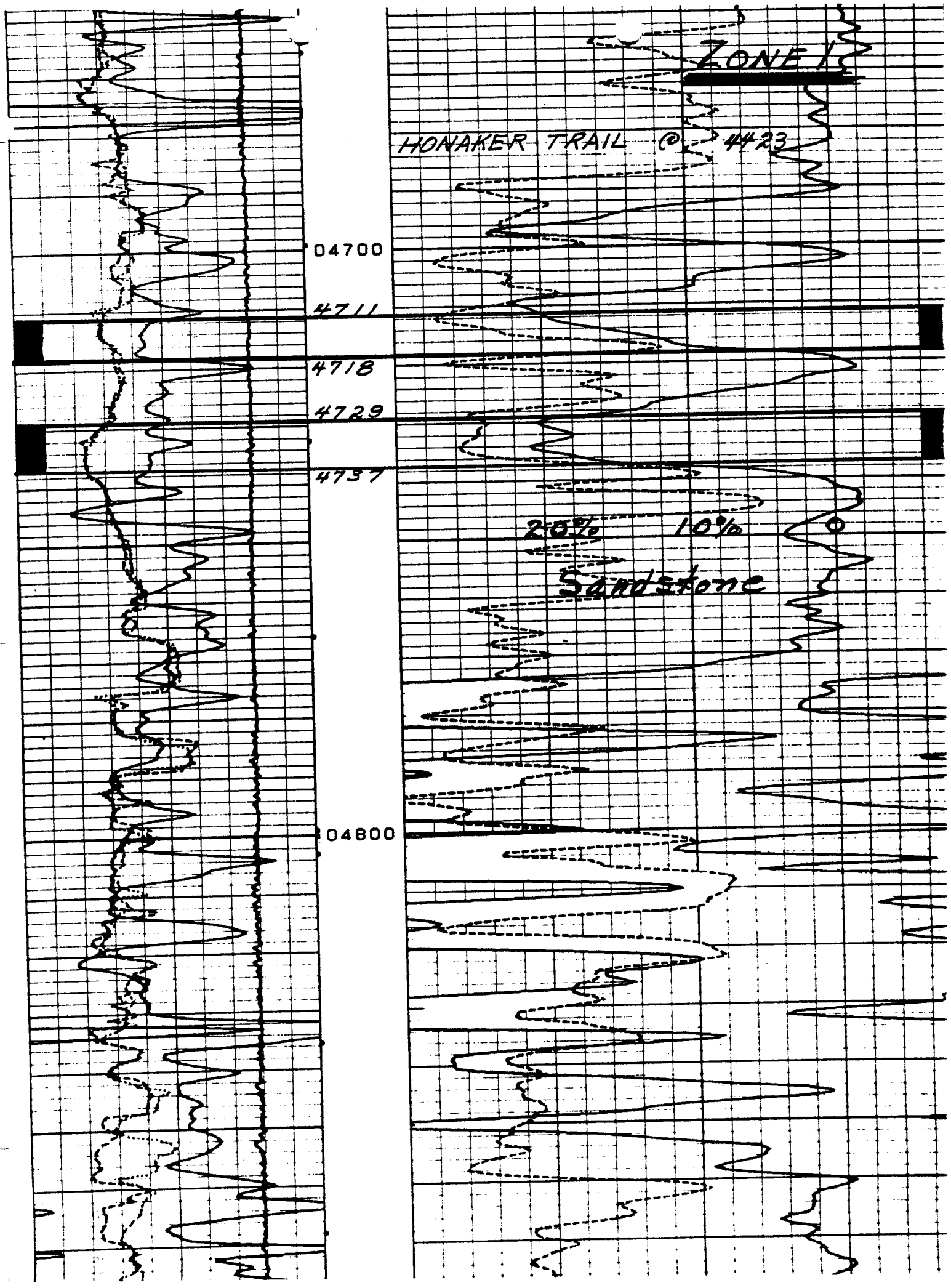
DRILL TIME

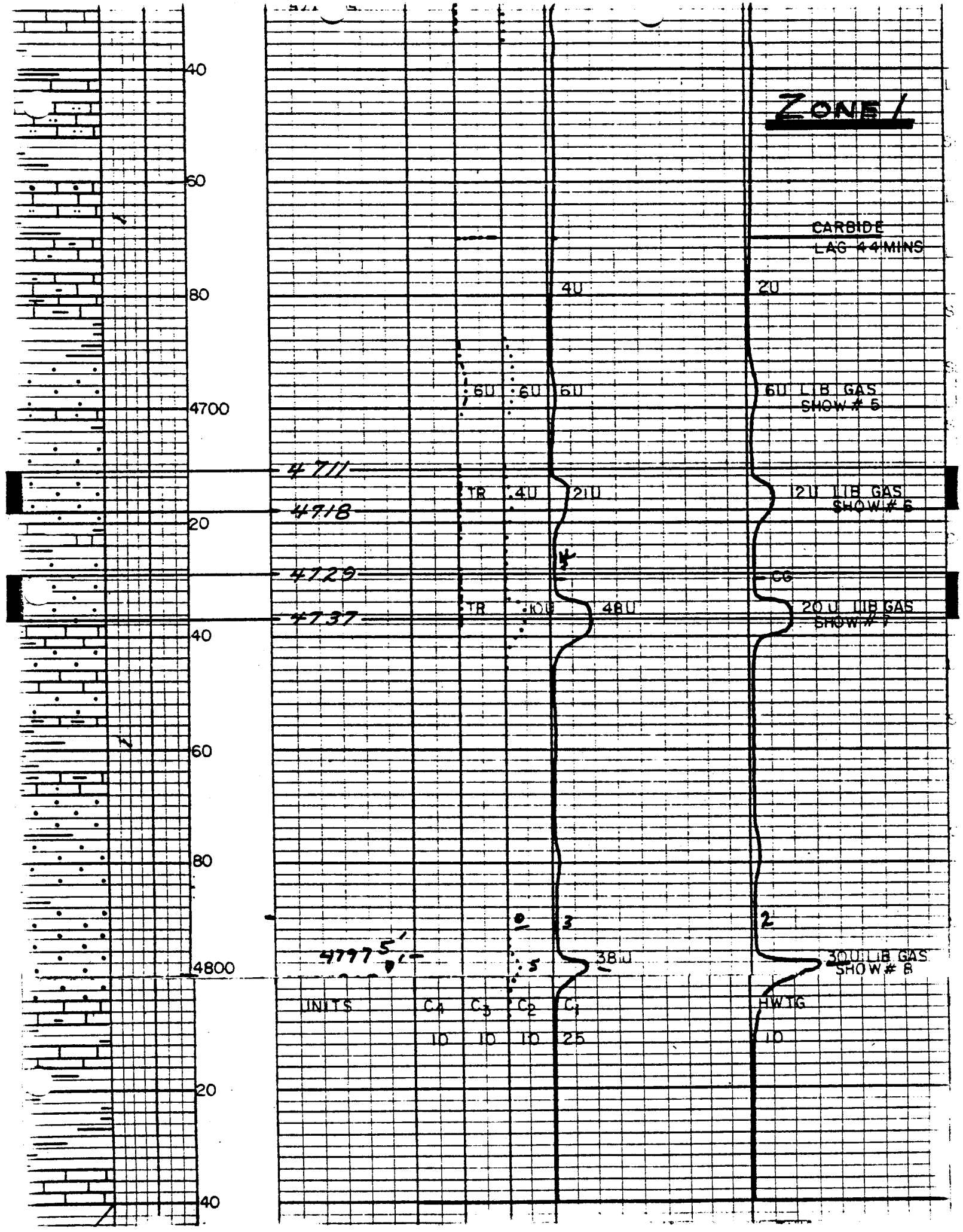
ABOVE 2.5
1.5
MIN. .5
PER 2.0
1 FT. 2.0
.5
1.0
BELOW 2.5

TYPE SHOW: STAIN ____ FLUOR. ____ OTS ____ GTS Mud-Gas
SHOW VARIATION: STEADY ____ ERRATIC ____ INCREASING X DECREASING X
OIL STAIN: EVEN ____ MOTTLED ____ SPOTTED ____ COLOR ____
LIGHT ____ MODERATE ____ DARK ____ "DEAD" ____
% TOTAL SAMPLE STAIN 0.0 % PORE VOLUME STAIN ____
FLUORESCENCE: EVEN ____ MOTTLED ____ SPOTTED ____ PINPOINT ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE FLUORESCENCE 0.0 % PORE VOLUME FLOUR. ____
"CUT FLUORESCENCE": FLASH. ____ STREAM. ____ SLOW ____ "RESIDUAL" ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE CUT 0.0 % PORE VOLUME CUT ____
POROSITY: GOOD X FAIR X POOR ____ NONE ____ % EST. ____
DESCRIPTION 4711-18 Ss., wh., clr., m./c.g., ang./subrnd., s. wh. cly.
4729-37 Ss., wh., clr., m./c.g., ang./subrnd., abd. kao. cly in samp.
Total Gas Increase: 4711-18 10 Units C_1-C_2; 4729-37 17 Units C_1-C_2

ZONE EVALUATION: Both sands are water wet and at 13% porosity are considered as devoid of any effective porosity.

NOTIFIED: ____ DATE ____ TIME ____
GEOLOGIST: Clarence L. Harr DATE 5-21-84


ZONE 1
HONAKER TRAIL @ 4423
04700
4711
4718
4729
4737
20%
10%
Sandstone
04800


ZONE 1
CARBIDE
LAG 44 MINS
40
60
80
4700
20
40
60
80
4800
20
40
4711
4718
4729
4737
4775'
4U
2U
6U
6U
6U
6U LIB GAS
SHOW # 5
TR
4U
21U
12U LIB GAS
SHOW # 6
CG
TR
10U
48U
20U LIB GAS
SHOW # 7
3
2
38U
30U LIB GAS
SHOW # 8
UNITS
C4
C3
C2
C1
HWTG
10
10
10
25
10

Clarence L. Harr
Consulting Petroleum Geologist

RESERVOIR EVALUATION

COMPANY TRANSCO
WELL TXPOC, Crowley Ranch No. 1-25
LOC. 25-34S-25E

FORMATION Honaker Trail (Paradox) ZONE NO. 2
ZONE INTERVAL 5134 - 5140

ZONE ANALYSIS

"E" LOG DEPTHS		POROSITY D	N	S	X-PLOT	RT	%SW
					Rw =	.04	
Top	5134						
6'	5136				.08	175	19
	5138						
Base	5140						

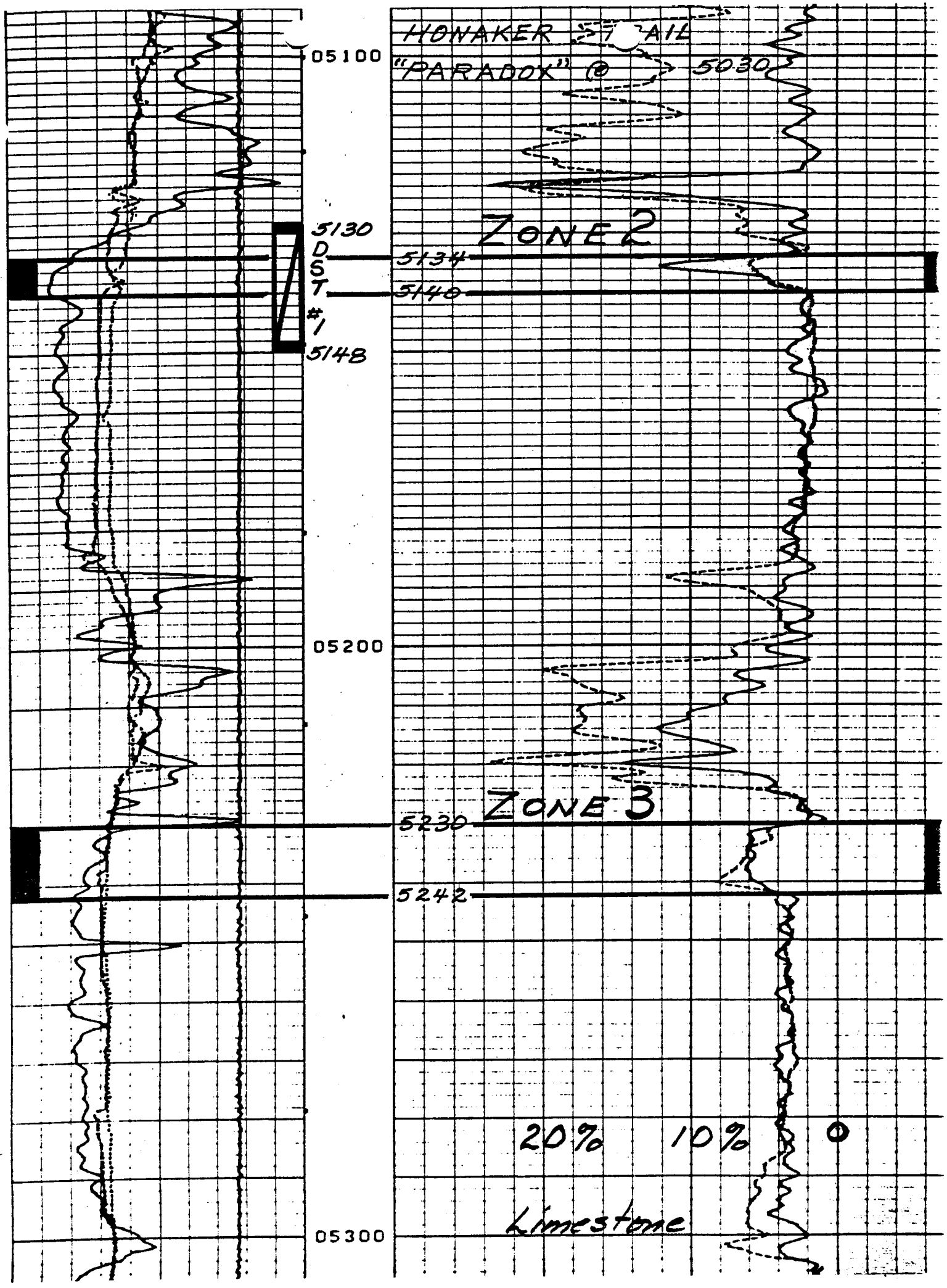
DRILL TIME
ABOVE 7
5
MIN. 2
PER 2.5
1 FT. 5
BELOW 8

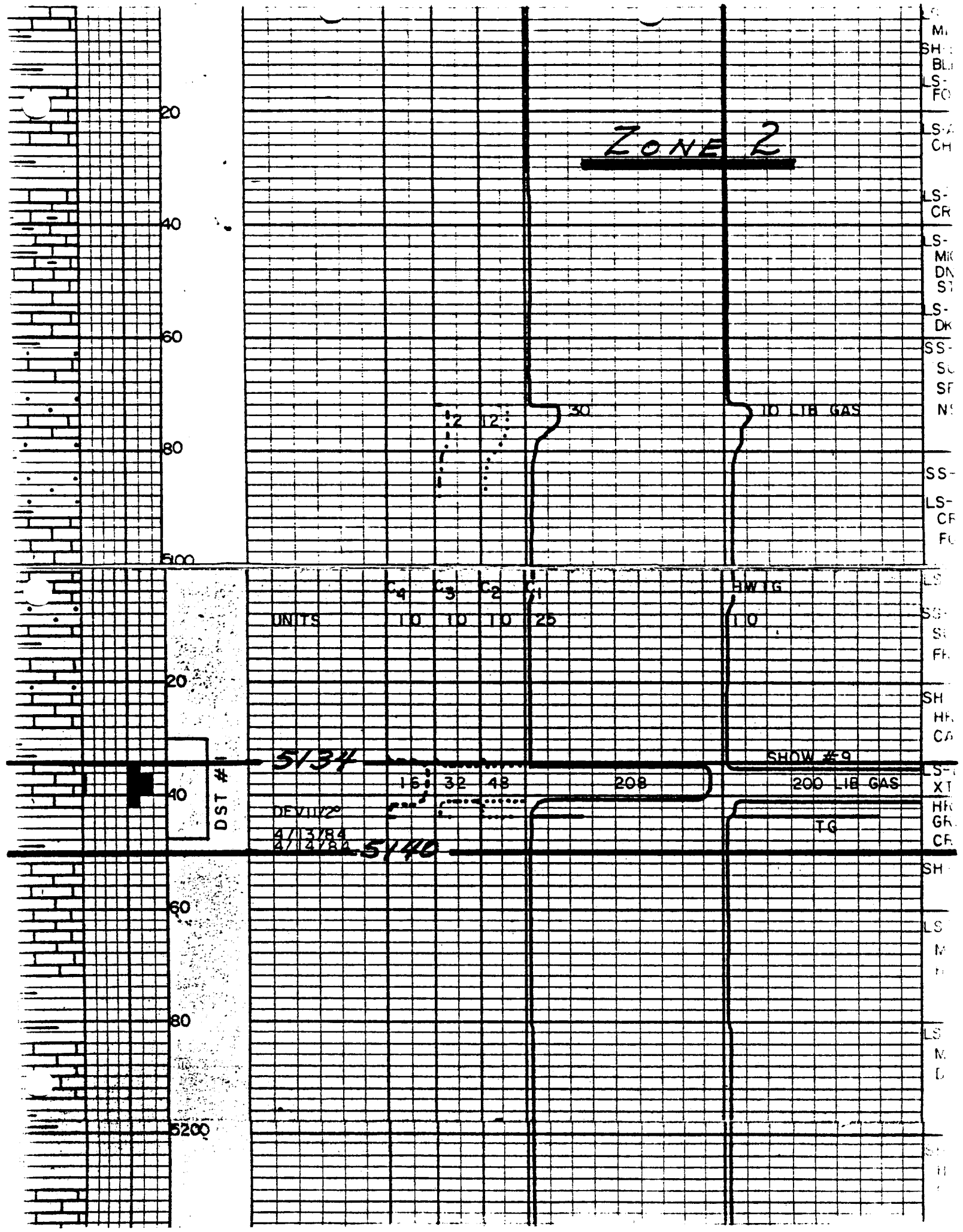
TYPE SHOW: STAIN ____ FLUOR. ____ OTS ____ GTS Mud-Gas
SHOW VARIATION: STEADY ____ ERRATIC ____ INCREASING ____ DECREASING ____
OIL STAIN: EVEN ____ MOTTLED ____ SPOTTED ____ COLOR ____
LIGHT ____ MODERATE ____ DARK ____ "DEAD" Tr.
% TOTAL SAMPLE STAIN 0.0 % PORE VOLUME STAIN ____
FLUORESCENCE: EVEN ____ MOTTLED ____ SPOTTED ____ PINPOINT ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE FLUORESCENCE 0.0 % PORE VOLUME FLOUR. ____
"CUT FLUORESCENCE": FLASH. ____ STREAM. ____ SLOW ____ "RESIDUAL" X
COLOR Yel. BRIGHT ____ PALE X DULL ____ FAINT ____
% TOTAL SAMPLE CUT Crushed chips % PORE VOLUME CUT ____
POROSITY: GOOD ____ FAIR X POOR ____ NONE ____ % EST. ____
DESCRIPTION Ls., brn., tan/crm., microxln., suc./f.xln., s.v. ool. fr. intxln. w. tr. oomol. por. (ool. pkst. w. mud rexln.)

Total Gas Increase: 195 Units C_1-C_4; Neutron/Density x-over valid.

ZONE EVALUATION: Zone 2 was tested on DST No. 1 5130-48. 10 feet of drilling mud with a rainbow of oil was recovered from the drill pipe. Relative flow and shut-in pressures indicate the zone as tight. Zone contains hydrocarbon, but is thin, impermeable and not capable of production.

NOTIFIED: ____ DATE ____ TIME ____
GEOLOGIST: Clarence L. Harr DATE 5-21-84


HONAKER #1 TAIL
"PARADOX" @ 5030
05100
5130
D
S
T
#1
5148
ZONE 2
5134
5140
05200
ZONE 3
5230
5242
20%
10%
0
Limestone
05300


ZONE 2
20
40
60
80
5100
2
12
30
10 LIB GAS
C4
C3
C2
C1
HWTG
UNITS
10
10
10
25
10
20
5134
SHOW #9
16
32
48
208
200 LIB GAS
40
DST #1
DEV 11/2°
4/13/84
4/14/84
5140
TG
60
80
5200

Clarence L. Harr
Consulting Petroleum Geologist

RESERVOIR EVALUATION

COMPANY TRANSCO
WELL TXPOC, Crowley Ranch No. 1-25
LOC. 25-34S-25E

FORMATION Honaker Trail (Paradox) ZONE NO. 3
ZONE INTERVAL 5230 - 5242

ZONE ANALYSIS

"E" LOG DEPTHS		POROSITY D	N	$	X-PLOT	RT	%SW
				x-Plot	Vsh cor.	Rw =	.04
Top	5230			.035	.00	175	--
	5234	Vsh	= 30%	.07	.02	90	100
	5237			.07	.02	85	100
	5240	Vsh	= 25%	.075	.03	85	72
Base	5242			.045	.00	100	--

Ø cor. = Ø - Vsh (Øsh)

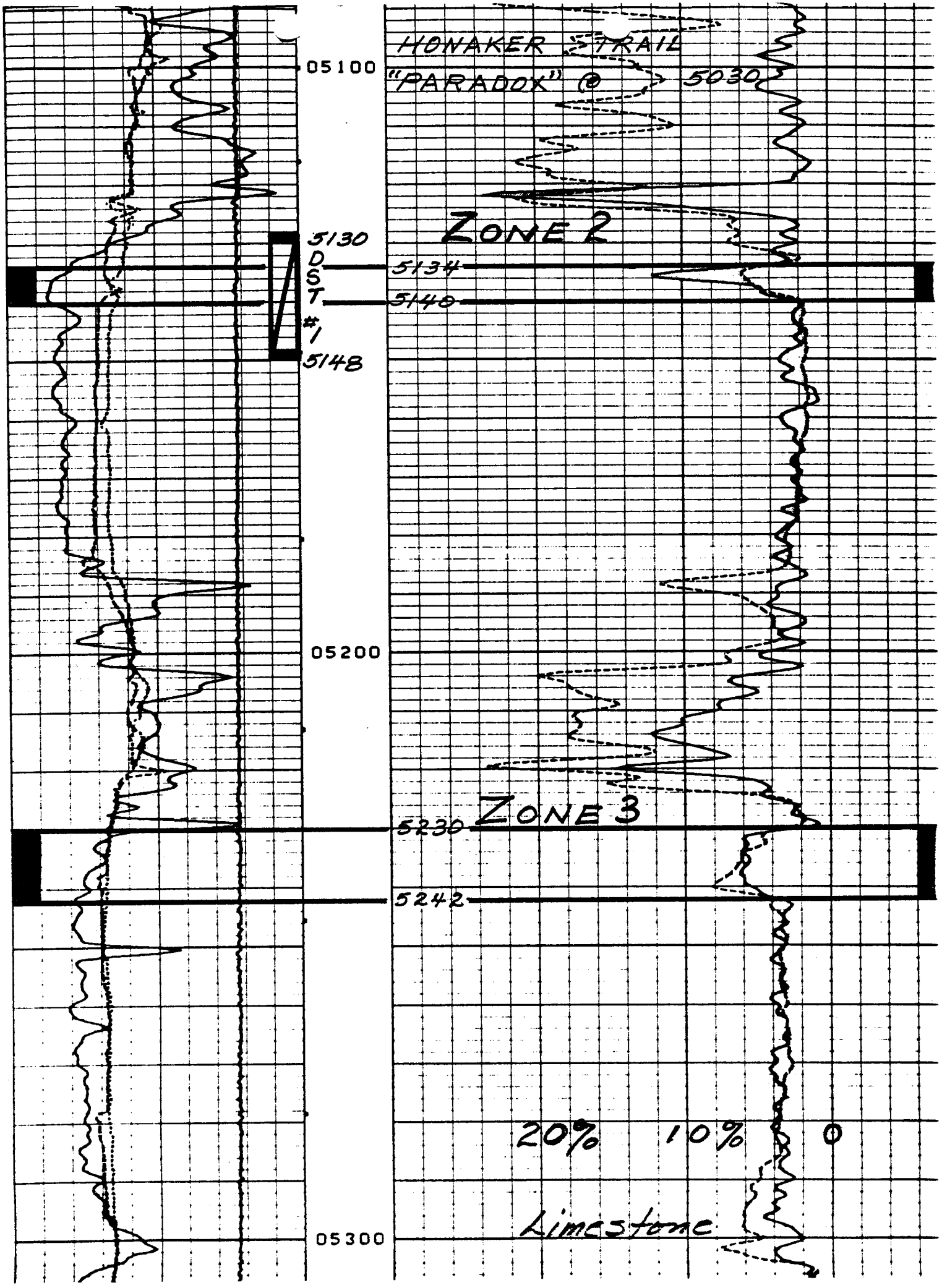
DRILL TIME

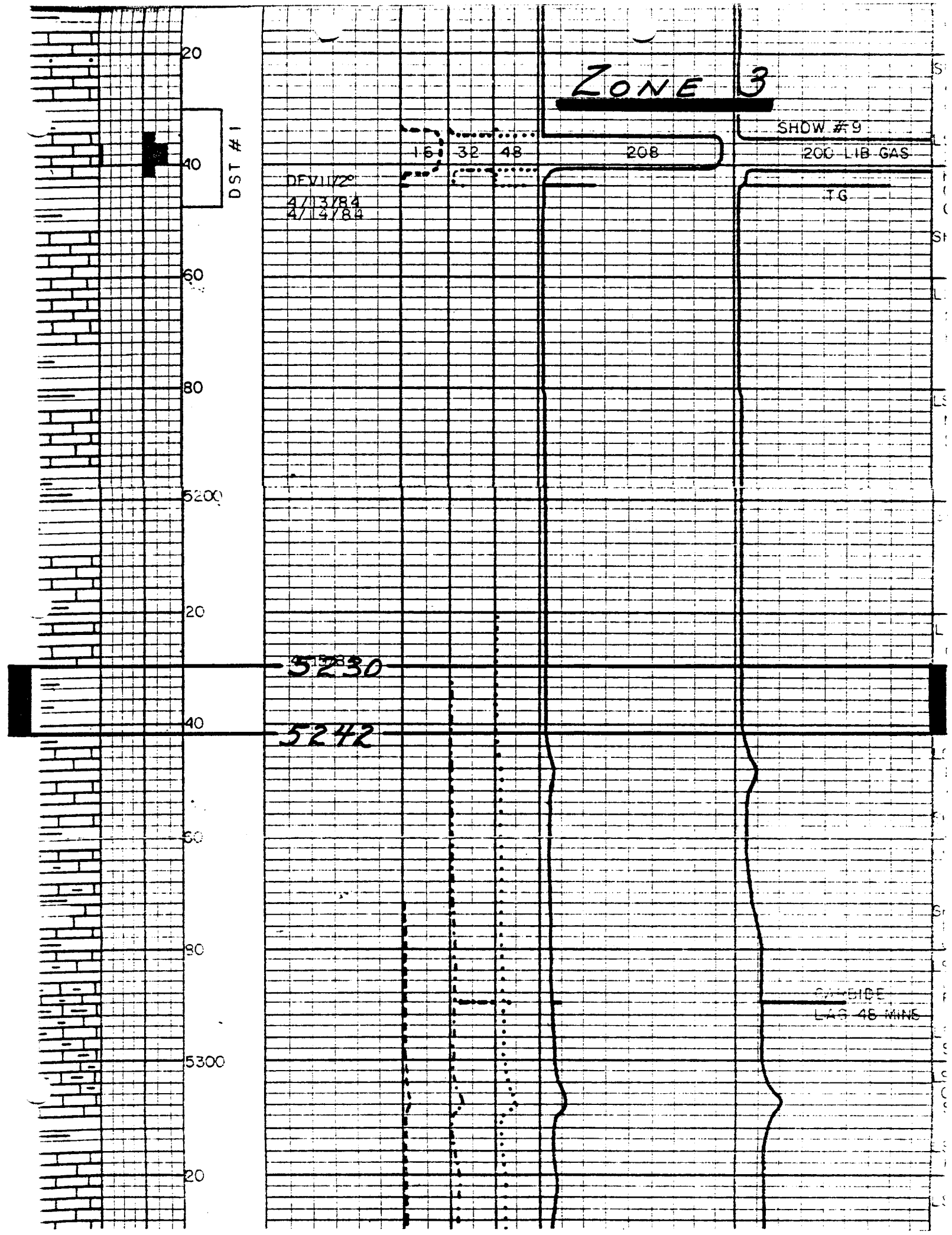
ABOVE	8
	8
MIN.	10
PER	10
1 FT.	10
	12
BELOW	10

TYPE SHOW: STAIN ____ FLUOR. ____ OTS ____ GTS ____
SHOW VARIATION: STEADY ____ ERRATIC ____ INCREASING ____ DECREASING ____
OIL STAIN: EVEN ____ MOTTLED ____ SPOTTED ____ COLOR ____
LIGHT ____ MODERATE ____ DARK ____ "DEAD" ____
% TOTAL SAMPLE STAIN 0.0 % PORE VOLUME STAIN ____
FLUORESCENCE: EVEN ____ MOTTLED ____ SPOTTED ____ PINPOINT ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE FLUORESCENCE 0.0 % PORE VOLUME FLOUR. ____
"CUT FLUORESCENCE": FLASH. ____ STREAM. ____ SLOW ____ "RESIDUAL" ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE CUT 0.0 % PORE VOLUME CUT ____
POROSITY: GOOD ____ FAIR ____ POOR ____ NONE X % EST. ____
DESCRIPTION Ls., dk.gy.-brn., buff, microxln./sl. chky., arg., dns.
There was no mud-gas increase during penetration.

ZONE EVALUATION: Density-Neutron-Sonic x-plots at 7 to 7.5% porosity; however, the zone shows a Vsh of 25 to 30%. Correcting for the % of shale reduces the porosity to an ineffective 2 to 3% and increases the Sw to 100%. Zone 3 is tight and devoid of hydrocarbon.

NOTIFIED: ____ DATE ____ TIME ____
GEOLOGIST: Clarence L. Harr DATE 5-21-84


HONAKER TRAIL
"PARADOX" @ 5030
05100
5130
DST #1
5148
ZONE 2
5134
5140
05200
ZONE 3
5230
5242
20%
10%
0
Limestone
05300


ZONE 3
SHOW #9
200 LIB GAS
208
16
32
48
TG
DEV 1 1/2°
4/13/84
4/14/84
DST #1
20
40
60
80
5200
20
5230
40
5242
60
80
5300
20
OUTSIDE
LAG 48 MINS

Clarence L. Harr
Consulting Petroleum Geologist

RESERVOIR EVALUATION

COMPANY TRANSCO
WELL TXPOC, Crowley Ranch No. 1-25
LOC. 25-34S-25E

FORMATION Upper Ismay ZONE NO. 4
ZONE INTERVAL 5160 - 5613 and 5621 - 5629

ZONE ANALYSIS

"E" LOG DEPTHS		POROSITY D	N	$	X-PLOT	RT	%SW
				x-Plot	Vsh cor.	Rw	= .04
Top	5610			.034	.012	70	100
3'	5612	Vsh	= 12%	.07	.048	36	69
Base	5613			.034	.012	35	100
Top	5621	Vsh	= 12%	.06	.038	90	55
8'	5625			.07	.048	35	70
Base	5629			.032	.01	40	100

Ø cor. = Ø - Vsh (Øsh)

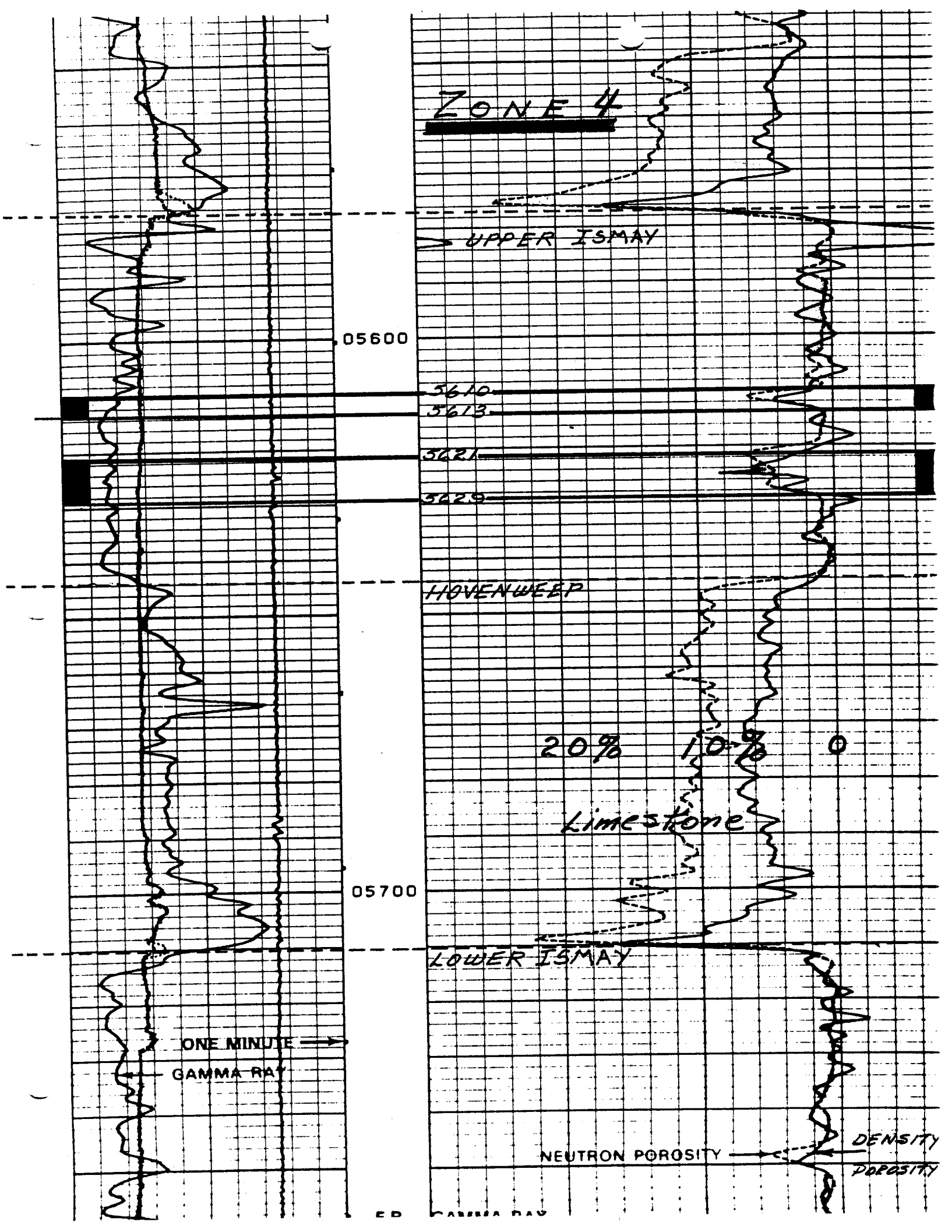
DRILL TIME

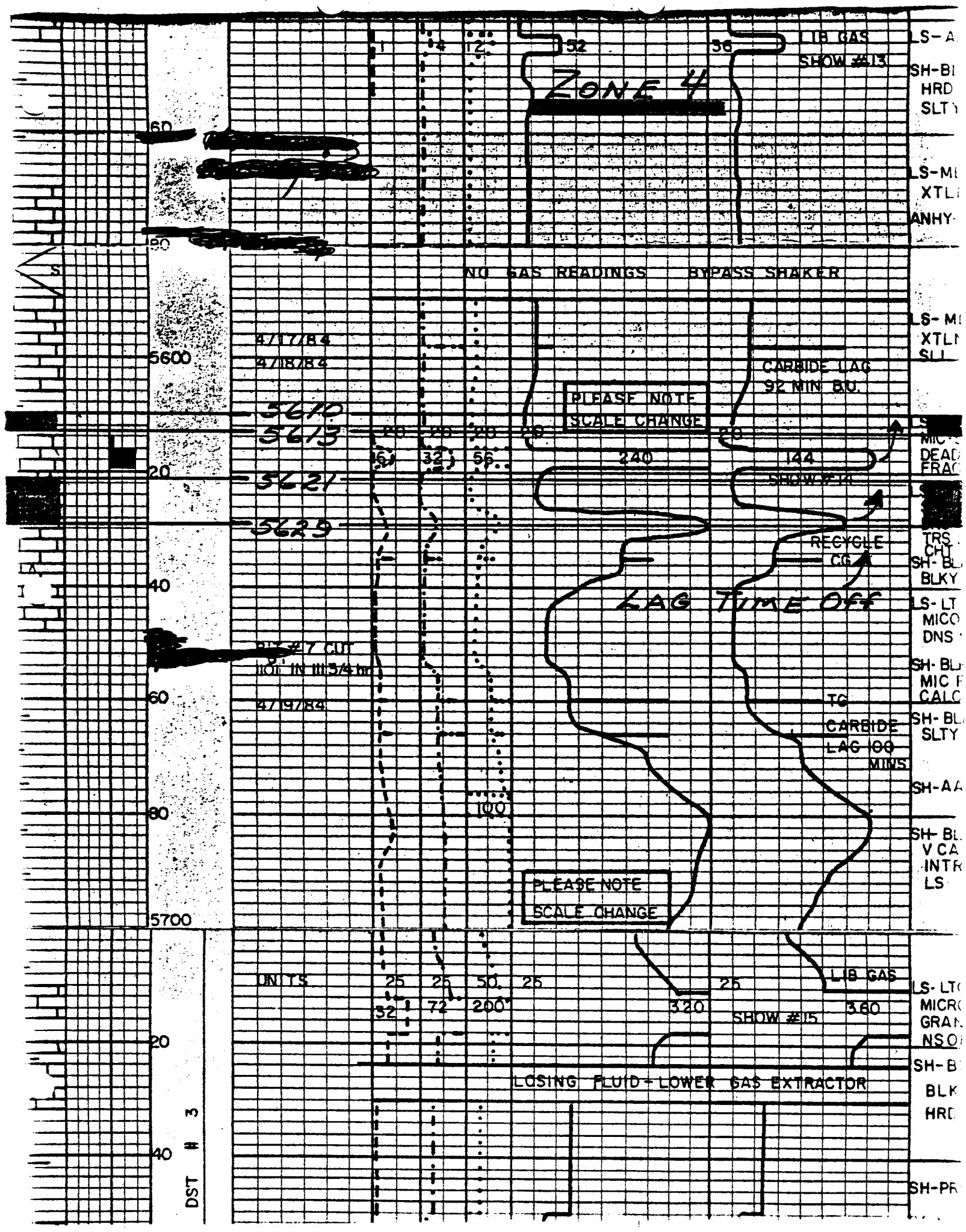
ABOVE	8
	11
MIN.	12
PER	7
1 FT.	11
	7
	7
BELOW	8

TYPE SHOW: STAIN ____ FLUOR. ____ OTS ____ GTS Mud-Gas
SHOW VARIATION: STEADY ____ ERRATIC ____ INCREASING ____ DECREASING ____
OIL STAIN: EVEN ____ MOTTLED ____ SPOTTED ____ COLOR ____
LIGHT ____ MODERATE ____ DARK ____ "DEAD" X
% TOTAL SAMPLE STAIN 0.0 % PORE VOLUME STAIN ____
FLUORESCENCE: EVEN ____ MOTTLED ____ SPOTTED ____ PINPOINT ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE FLUORESCENCE 0.0 % PORE VOLUME FLOUR. ____
"CUT FLUORESCENCE": FLASH. ____ STREAM. ____ SLOW ____ "RESIDUAL" ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE CUT 0.0 % PORE VOLUME CUT ____
POROSITY: GOOD ____ FAIR ____ POOR X NONE ____ % EST. ____
DESCRIPTION 5610-13 Ls., wh./crm., f. suc./chky., microxln./f. xln. w. p. intxln. por., tr. vug., chn., frac. por.; 5621-5629 Ls., wh./crm., chky./f. suc., microxln., p. intgran por.

ZONE EVALUATION: 5610-13 Total gas increase of 134 Units C_1-C_4; 5621-29 Total gas increase of 100 Units C_1-C_4. Zone 4 lacks sufficient effective porosity and with relatively high water saturations is considered as devoid of hydrocarbon potential.

NOTIFIED: ____ DATE ____ TIME ____
GEOLOGIST: Clarence L. Harr DATE 5-21-84


ZONE 4
UPPER ISMAY
05600
5610
5613
5621
5629
HOVENWEEP
20%
10%
0
Limestone
05700
LOWER ISMAY
ONE MINUTE
GAMMA RAY
NEUTRON POROSITY
DENSITY
POROSITY


ZONE 4
LIB GAS
SHOW #13
NO GAS READINGS BYPASS SHAKER
4/17/84
4/18/84
5600
CARBIDE LAG
92 MIN B.U.
PLEASE NOTE
SCALE CHANGE
5610
5613
5621
5629
240
144
SHOW #14
RECYCLE
CG
LAG TIME OFF
4/19/84
TG
CARBIDE
LAG 100
MINS
5700
UNITS
LIB GAS
SHOW #15
LOSING FLUID - LOWER GAS EXTRACTOR
DST # 3

Clarence L. Harr
Consulting Petroleum Geologist

RESERVOIR EVALUATION

COMPANY TRANSCO
WELL TXPOC, Crowley Ranch No. 1-25
LOC. 25-34S-25E

FORMATION Lower Ismay ZONE NO. 5
ZONE INTERVAL 5712 - 5718

ZONE ANALYSIS

"E" LOG DEPTHS		POROSITY D	N	S	X-PLOT	RT	%SW
						Rw =	.035
Top	5712				.02	140	79
6'	5715				.01	350	100
Base	5718				.005	550	100

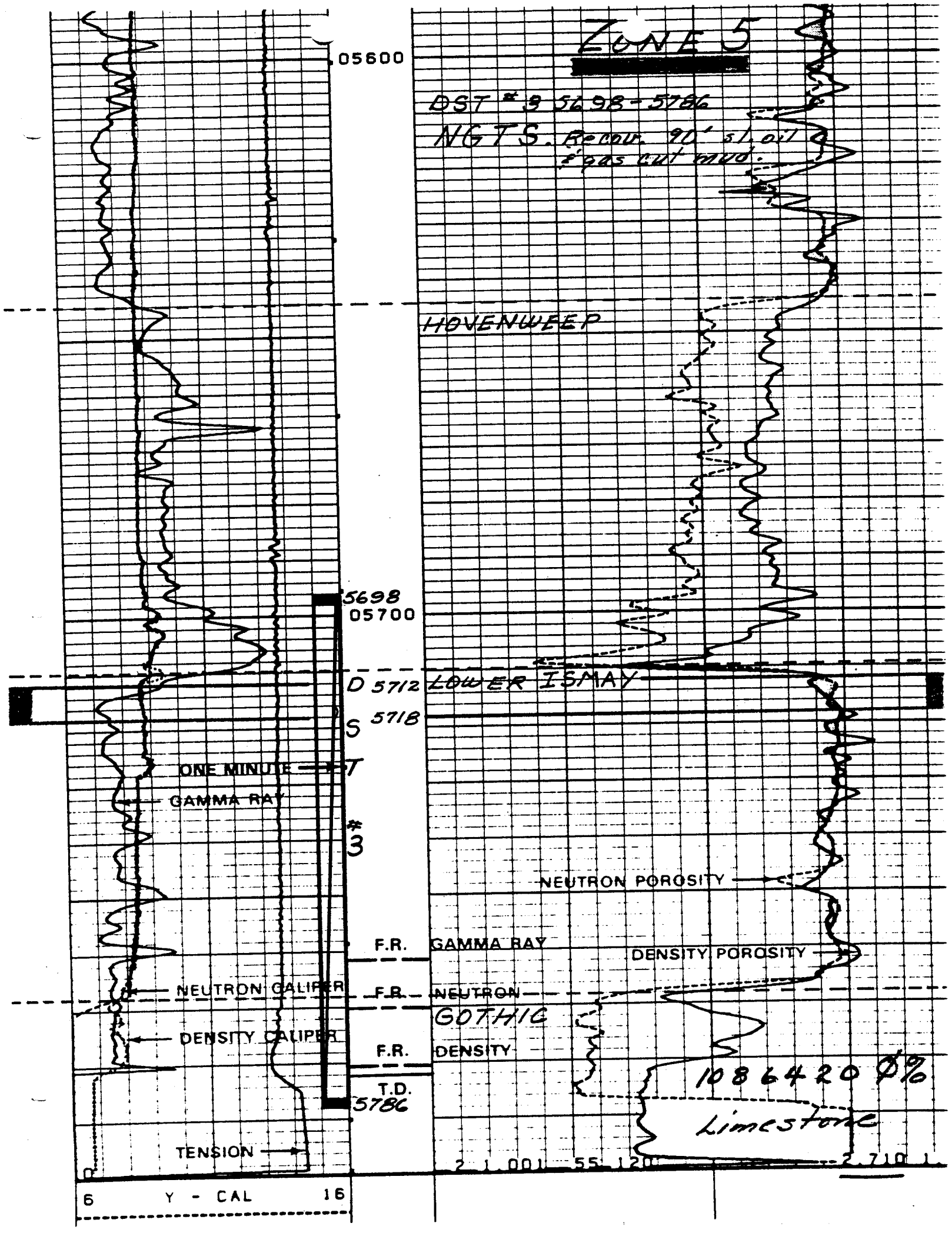
DRILL TIME

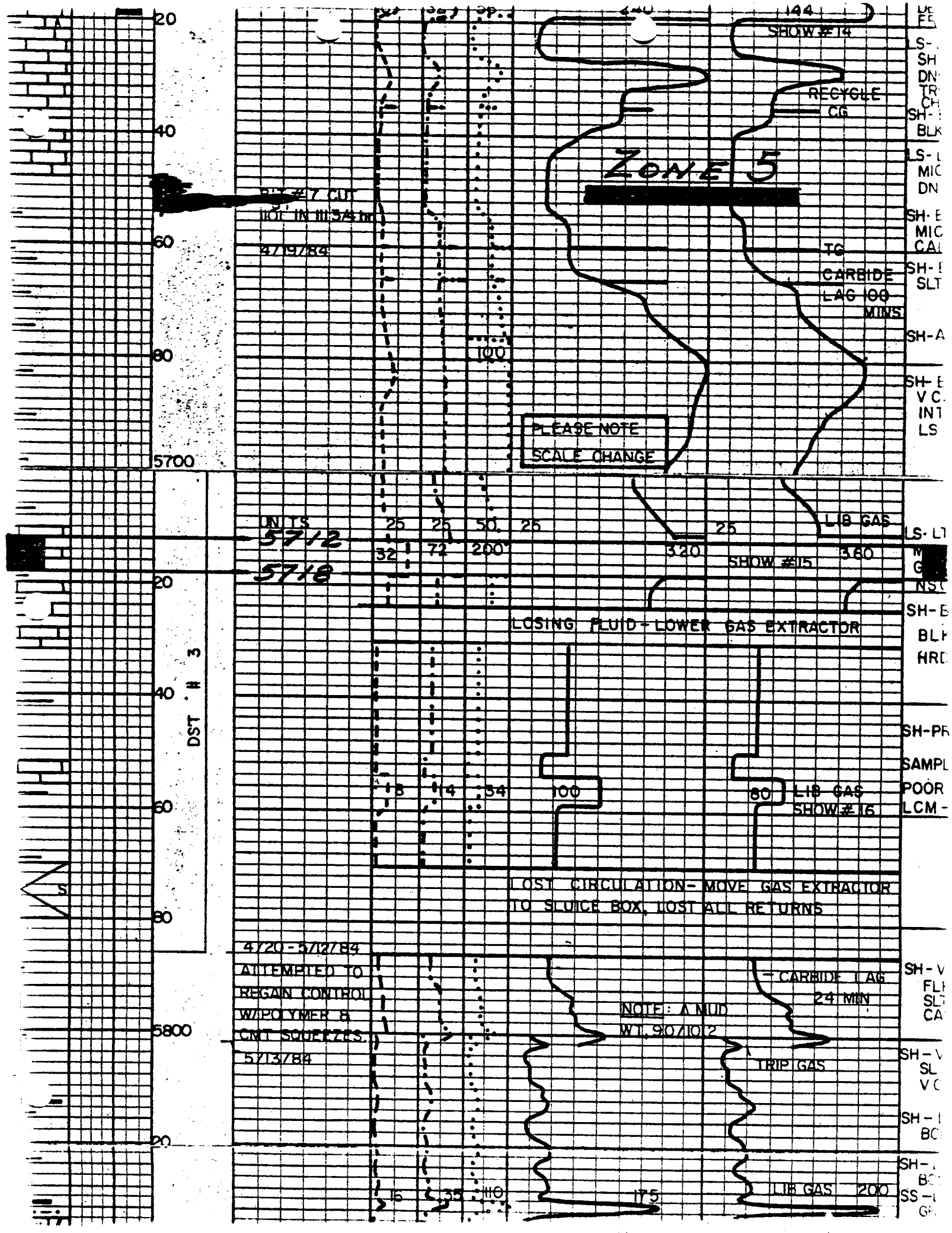
ABOVE 6
4
MIN.
PER 2
FT.
7
BELOW 5

TYPE SHOW: STAIN ____ FLUOR. ____ OTS ____ GTS Mud-Gas
SHOW VARIATION: STEADY ____ ERRATIC ____ INCREASING ____ DECREASING ____
OIL STAIN: EVEN ____ MOTTLED ____ SPOTTED ____ COLOR ____
LIGHT ____ MODERATE ____ DARK ____ "DEAD" ____
% TOTAL SAMPLE STAIN 0.0 % PORE VOLUME STAIN ____
FLUORESCENCE: EVEN ____ MOTTLED ____ SPOTTED ____ PINPOINT ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE FLUORESCENCE 0.0 % PORE VOLUME FLOUR. ____
"CUT FLUORESCENCE": FLASH. ____ STREAM. ____ SLOW ____ "RESIDUAL" ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE CUT 0.0 % PORE VOLUME CUT ____
POROSITY: GOOD ____ FAIR ____ POOR X NONE ____ % EST. ____
DESCRIPTION Ls., gy., buff, dk.gy.-brn., tan, microxln./suc./f. xln., loc. fos. & pel., Tr. intpar., vug.& chn. por., p. intgran. & intxln. por.

ZONE EVALUATION: DST No. 3 5698-5786 recovered only 90 ft. of sl. gas & oil cut mud. The low press. indicates a total lack of premeability. The unit is tight and non-productive.

NOTIFIED: ____ DATE ____ TIME ____
GEOLOGIST: Clarence L. Harr DATE 5-21-84


ZONE 5
[redacted]
05600
DST #3 5698-5786
NGTS. Recov. 90' sl. oil & gas cut mud.
HOVENWEEP
5698
05700
D 5712
LOWER ISMAY
S 5718
ONE MINUTE
T
GAMMA RAY
#3
NEUTRON POROSITY
F.R.
GAMMA RAY
DENSITY POROSITY
NEUTRON CALIPER
F.R.
NEUTRON
GOTHIC
DENSITY CALIPER
F.R.
DENSITY
1086420 Ø%
T.D.
5786
Limestone
TENSION
6
Y - CAL
16


SHOW #14
RECYCLE
CG
ZONE 5
PIT #7 CUT
100' IN 111:34 hr
4/19/84
TG
CARBIDE
LAG 100
MINS
PLEASE NOTE
SCALE CHANGE
LIB GAS
UNITS
5712
5718
SHOW #15
LOSING FLUID - LOWER GAS EXTRACTOR
DST # 3
LIB GAS
SHOW #16
LOST CIRCULATION - MOVE GAS EXTRACTOR
TO SLUICE BOX, LOST ALL RETURNS
4/20 - 5/12/84
ATTEMPTED TO
REGAIN CONTROL
W/POLYMER &
CMT SQUEEZES.
5/13/84
CARBIDE LAG
24 MIN
NOTE: A MUD
WT. 90/102
TRIP GAS
LIB GAS
5700
5800

Clarence L. Harr
Consulting Petroleum Geologist

RESERVOIR EVALUATION

COMPANY TRANSCO
WELL TXPOC, Crowley Ranch No. 1-25
LOC. 25-34S-25E

FORMATION Lower Desert Creek ZONE NO. 6
ZONE INTERVAL 5886 - 5891

ZONE ANALYSIS

"E" LOG DEPTHS		POROSITY D	N	S	X-PLOT	RT	%SW
				x-Plot	Vsh cor.	Rw	= .023
Top	5886	Vsh =	25%	.04	.03	40	79
	5888	Vsh =	20%	.04	.03	30	92
Base	5891	Vsh =	40%	.09	.054	15	72

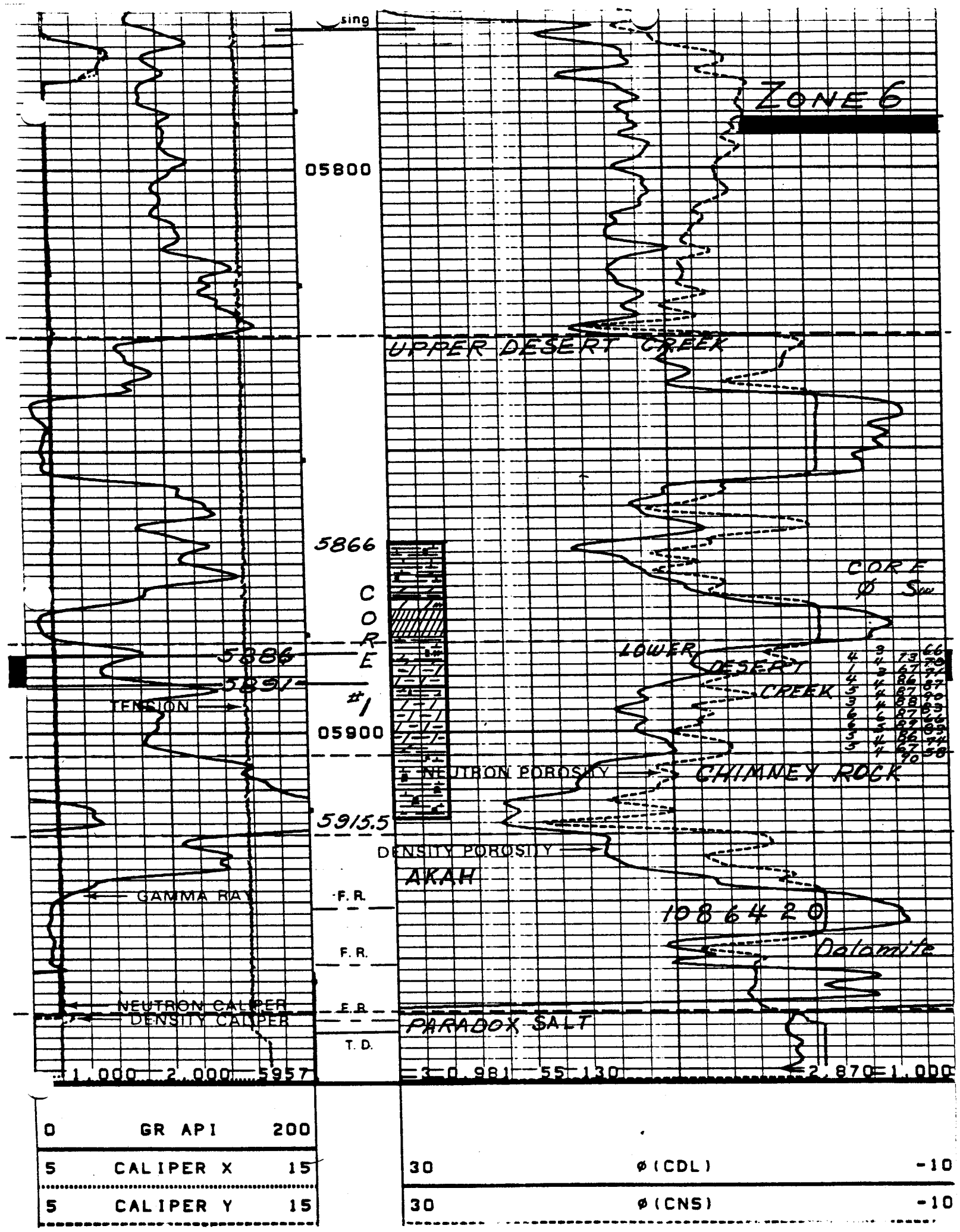
Core No. 1 5866-5915.5

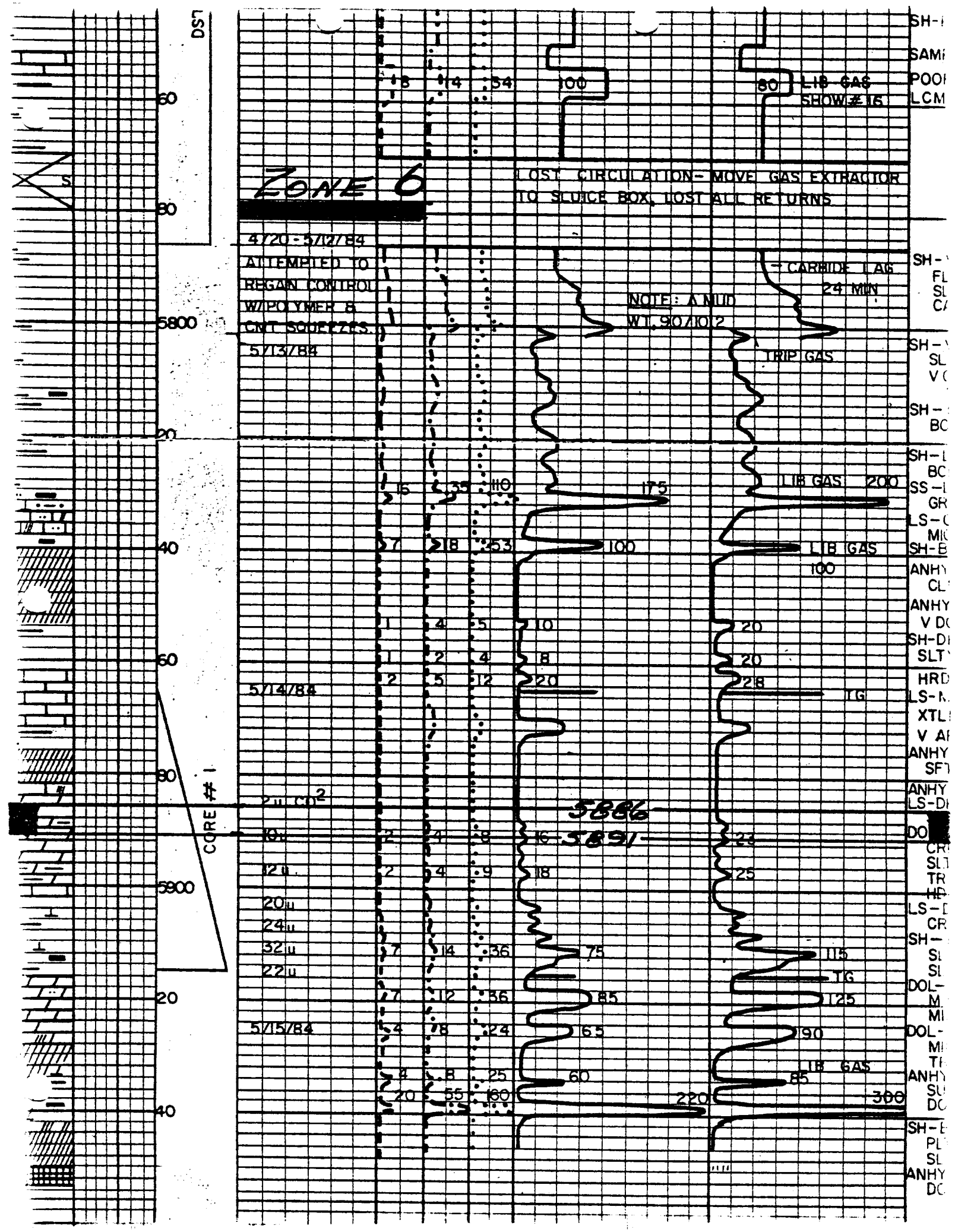
DRILL TIME
Core #1
ABOVE
MIN.
PER
1 FT.
BELOW

TYPE SHOW: STAIN ____ FLUOR. ____ OTS ____ GTS ____
SHOW VARIATION: STEADY ____ ERRATIC ____ INCREASING ____ DECREASING ____
OIL STAIN: EVEN ____ MOTTLED ____ SPOTTED X COLOR ____
LIGHT X MODERATE ____ DARK ____ "DEAD" X
% TOTAL SAMPLE STAIN ____ % PORE VOLUME STAIN ____
FLUORESCENCE: EVEN ____ MOTTLED ____ SPOTTED ____ PINPOINT ____
COLOR Brn. BRIGHT ____ PALE ____ DULL X FAINT ____
% TOTAL SAMPLE FLUORESCENCE ____ % PORE VOLUME FLOUR. ____
"CUT FLUORESCENCE": FLASH. ____ STREAM. ____ SLOW ____ "RESIDUAL" ____
COLOR ____ BRIGHT ____ PALE ____ DULL ____ FAINT ____
% TOTAL SAMPLE CUT ____ % PORE VOLUME CUT ____
POROSITY: GOOD ____ FAIR ____ POOR ____ NONE X % EST. ____
DESCRIPTION Dol., brnish.-blk., microxln., v. arg., w. few vert.-horz. & 20° frac. & vugs healed w. Anhy., spt. bleeding oil stn., faint dull brn. fluor., dd. 0 on selected fracs.

ZONE EVALUATION: Core porosities range from 1 to 4% & Sw 66 to 86%. The zone does contain some hydrocarbon, but is highly argillaceous and tight. Subject zone is impermeable and non-productive.

NOTIFIED: ____ DATE ____ TIME ____
GEOLOGIST: Clarence L. Harr DATE 5-21-84


sing
ZONE 6
05800
UPPER DESERT CREEK
5866
CORE
5886
5891
TENSION
#1
05900
NEUTRON POROSITY
CHIMNEY ROCK
5915.5
DENSITY POROSITY
AKAH
GAMMA RAY
F. R.
F. R.
F. R.
T. D.
NEUTRON CALIPER
DENSITY CALIPER
PARADOX SALT
LOWER DESERT CREEK
CORE
Ø
Dolomite
1.000 2.000 5957
3 0.981 55 130
2.870 1.000
0 GR API 200
5 CALIPER X 15
5 CALIPER Y 15
30 Ø(CDL) -10
30 Ø(CNS) -10


DST
ZONE 6
LOST CIRCULATION- MOVE GAS EXTRACTOR TO SLUICE BOX, LOST ALL RETURNS
LIB GAS SHOW #16
4/20 - 5/12/84
ATTEMPTED TO REGAIN CONTROL W/POLYMER & CNT SQUEEZES.
5/13/84
= CARBIDE LAG 24 MIN
NOTE: A MUD WT. 90/10 2
TRIP GAS
LIB GAS
5/14/84
TG
CORE #1
5886
5891
5/15/84
SH-
SAM
POO
LCM
SH-
FL
SL
C
SH-
SL
V
SH-
BC
SH-
BC
SS-
GR
LS-
MI
SH-B
ANHY
CL
ANHY
V D
SH-D
SLT
HRD
LS-M
XTL
V A
ANHY
SF
ANHY
LS-D
DO
CR
SL
TR
HA
LS-D
CR
SH-
SL
SL
DOL-
M
MI
DOL-
MI
TR
ANHY
SU
DO
SH-B
PL
SL
ANHY
DO

Clarence L. Harr
Consulting Petroleum Geologist

DRILL STEM TEST

DATA

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
TXPOC, Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DST NO. 1 5130-5148 (18') Honaker Trail (Paradox)

Reason: Drilling break with 195 Unit total gas show containing C_1-C_4 in a oolitic lime-packstone with some fair intercrystalline and a trace of oomoldic porosity. Crushed chips gave a pale-yellow residual cut fluorescence.

IF 15 min. - opened with good blow (12" bubble), @ 2 min. bubble remained at 12" with 7 oz. pressure, @ 5 min. decreased to 11" and 5 oz., @ 10 min. decreased to 8" and 3 oz., @ 15 min. decreased to 6" and 1 oz. Closed tool. NGTS

ISI 30 min. - surface bubble slowly died.

FF 60 min. - opened with weak blow (5" bubble), @ 10 min. decreased to 3" bubble and 0.0 oz. pressure, @ 20 min. decreased to 1", @ 40 min. down to 1/4", dead after 60 min. Closed tool. NGTS

FSI 120 min. -

Recovered: 10' (.07 bbls.) drilling mud with rainbow of oil.

Bottom Hole Sampler: recovered .62 cu. ft. gas @ 80 psi and 2300 cc of gas and oil cut mud.

Resistivity:

Mud Pit Samp.	- 4.0 ohms @ 67°F
Top D.P. Samp.	- 4.12 ohms @ 70°F
Samp. Chamber	- 4.70 ohms @ 70°F
Chlorides Top D.P. Samp.	- 350 ppm

Pressures:

Top Chart (5112)				Bottom Chart (5148)			
IHP	2397		FHP 2397	IHP	2411		FHP 2411
IFP	13.4	to	13.4	IFP	26.7	to	26.7
ISIP			80.3	ISIP			106.7
FFP	13.4	to	13.4	FFP	26.7	to	26.7
FSIP			107.0	FSIP			106.7

Bottom Hole Temp: 118°F

Date Run: April 14, 1984

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

DRILL STEM TEST

DATA

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
TXPOC, Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DST NO. 3 5698-5786 (88') Lower Ismay
(DST NO. 2 was a misrun)

Reason: Drilling break with 240 Unit total gas show containing C_1-C_4 in a pelletal lime-mudstone-wakestone with poor intercrystalline and sucrosic porosity.

IF 30 min. - opened with very weak blow (1 1/2" bubble), remained for 10 min. then decreased to 1" @ 15 min., 1/2" @ 20 min. then remained to end of 30 min. Closed tool. NGST

ISI 60 min. - surface bubble died.

FF 37 min. - opened with no surface bubbles, remained dead to end of 37 min. Closed tool. NGTS

FSI 65 min. -

Recovered: 90 ft. (.44 bbls.) sl. gas and oil cut mud.

Bottom Hole Sampler: recovered .007 cu. ft. gas @ 33 psi and 2450 cc of slightly oil and gas cut mud.

Resistivity:

Mud Pit Samp.	- 4.2 ohms	@ 63°F
Top D.P. Samp.	- 3.1 ohms	@ 68°F
Bot. D.P. Samp.	- 3.08 ohms	@ 68°F
Samp. Chamber	- 2.82 ohms	@ 65°F

Pressures:

Top Chart (5676)				Bottom Chart (5783)			
IP	2782		FHP 2782	IHP	2838		FHP 2838
IFP	26.7	to	40	IFP	120.4	to	133.7
ISIP			120	ISIP			187.2
FFP	40.0	to	40	FFP	133.7	to	133.7
FSIP			80	FSIP			141.7

Bottom Hole Temp: 130°F

Date Run: April 21, 1984

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

PERCENTAGE LOG

SAMPLE DESCRIPTION

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

30 ft. Samples 2080 ft. - 2710 ft.
(Drilled with no returns 1870 - 2100)

2080 - 2110	SLTST	90	rd.-brn., org.-tan., pk., sl. sdy., calc.
	SS	5	lt.org., lt.gy., v.f.g./f.g., subang., sl. calc., arg.
	SH	5	rd.-brn.
2110 - 40	SLTST	90	rd.-brn., org.-tan, pk., sl. sdy. calc.
	SS	10	lt.org., lt.gy., v.f./f.g., subang., sl. calc.
40 - 70	SS	90	rd.-brn., v.f.g., w. srt., v. slty., calc., ti.
	SH	10	rd., gy.-brn., blky./plty., sl. calc.
70 - 2220	SH	80	rd.-brn., gy./brn., brec., blky./plty., sl. calc.
	SS	20	rd., rd.-brn., sl. calc., v. arg.
2220 - 30	SH	90	rd.-brn., gy.-brn., mot. gy., brec., blky./plty., sl. calc.
	SLTST	10	lt.grn., dol.
30 - 60	SH	85	rd.-brn., mar., rd., mot. gy., brec., sl. calc.
	LS	10	lt.gy.-grn., crpxln., v. slty. loc.
	SLTST	5	lt.gy.-grn., tan, lmy.
60 - 90	SH	95	rd.-brn., mar., rd., mot. gy., brec., sl. calc.
	LS	5	lt.gy.-grn., crptoxln., v. slty. loc.
90 - 2320	SH	85	gy.brn., rd.-brn., calc.
	LS	15	gy.-brn., crptoxln., dns., slty.
2320 - 50	SH	85	gy.-brn., rd.-brn., calc.
	SLTST	15	lt.org.
50 - 80	SH	100	gy.-brn., rd.-brn., calc.
80 - 2410	SH	85	rd.-brn., gy.-brn., gy. mot., sl. calc.
	SLTST	15	rd.-brn./org., sl. calc.
2410 - 40	SH	90	rd.-brn./gy.-brn., loc. slty., sl. calc.
	SLTST	10	rd.-brn.
40 - 70	SH	75	rdish.-gy.-brn., blky., sl. calc.
	LS	15	rdish.-brn., dns., w. SH brec. frag.
	SLTST	10	rd.-brn.
70 - 2500	SH	90	rdish.-gy.-brn., rd., blky.
	SLTST	10	lt.org.-brn.
2500 - 30	SH	90	rd.-brn., rd., mar., f.mica., calc., loc. slty.
	LS	10	lt.gy.-tan, microxln., dns.
30 - 60	SH	85	rd.-gy., rd.-brn., rd., mar., purp., vgt., calc.
	LS	15	lt.gyish.-brn., crptoxln.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

2560 - 90	SH	60	gyish.-brn., rd.-brn., purp., mar., vgt., calc., loc. slty.
	LS	40	lt.gyish.-brn., crptoxln., loc. SH frag.
90 - 2620	SH	85	rd.-brn., gy.-brn., f.mica., plty./blky.
	SLTST	15	pk., sl. mica., loc. sdy.
2620 - 50	SS	75	clr., wh., gy.-brn., f./mg., ang./subang., s.v. mica., s.v. shly., f. C frag., s.w. calc. & Kao. void filler, p. por., por. less 10% NSOFC
	SH	25	rd.-brn., brn., blky. (Samples are 80% cmt. & rubber)
50 - 80	SS	90	clr., wh., f./m.g., ang./subang., calc. & Kao. void filler, clus./s. ls., por. less 10% NSOFC
	SH	10	a.a.
80 - 2710	SS	90	a.a. becms. finer grained, shly., w. C stks. LS & SH frag.
	SH	10	rd.-brn., brn.

10 ft. Samples 2710 ft. - Total Depth

2710 - 20	SS	75	a.a.
	SLTST	15	rd.-brn., rust, loc. sdy., calc.
	SH	10	rd.-brn., mot. dk., v. mica., sl. calc., slty.
20 - 30	SS	50	a.a.
	SLTST	30	rd.-brn., rust, loc. sdy., calc.
	SH	20	rd.-brn., mot. dk., v. mica., sl. calc., slty.
30 - 40	SLTST	60	a.a.
	SH	40	a.a.
40 - 50	SLTST	70	rd.-brn., rust, loc. sdy., loc. shly., calc.
	SH	25	rd.-brn., mot. dk.rd.-brn., slty., calc.
	SS	5	org.-brn./rd.-brn., v.f./f.g., v. slty. ti.
50 - 60	SH	80	rd.-brn., mar., mot., blky./plty., loc. mica.
	SLTST	15	a.a.
	SS	5	a.a.
60 - 70	SH	80	rd./dk.rd., rd.-brn., blky., (hd. clyst.)
	SLTST	15	org.-rd.-brn., sl. calc.
	SS	5	org.-brn., brn., f./m.g., arg., calc.
70 - 80	SH	50	rd./dk.rd., rd.-brn., purp., blky.
	SLTST	45	a.a.
	SS	5	org.-brn., v.f./f.g., v. arg., w.s. wh., clr., f./m.g. SS
80 - 90	SLTST	45	a.a.
	SS	35	wh., clr., f./m.g., w.s.c.g., calc., w. rnd. SH & C frag., lse./clus.
	SH	20	a.a.
90 - 2800	SLTST	45	org.-brn., sl. calc., loc. sdy.
	SS	40	wh., clr., org., v.f./m.g., s.c.g., s. R.F.Q.G., ang./rnd., p. srt.
	SH	15	rd./dk.rd., brn., blky., w. brn. Calc. frag.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

2800 -	10	SS	85	org., wh., clr., m./c.g., subang./rnd., abd. R.F.Q.Gs., fr. srt., fr. por.
		SH	15	rd., rd.-brn., loc. slty. & sdy.
10 -	20	SS	80	a.a. w. incr., clr., wh., SS w. SH peb. (cave?)
		SH	20	a.a.
20 -	30	SS	75	wh., clr., f./m.g., w.s.c.g., calc., p./fr. por.
		SH	25	a.a.
30 -	40	SS	50	org., clr., wh., f./m.g., ang./rnd., lse., s.v. slty., p./fr. por.
		SLTST	45	org.-brn., sdy., sl. calc.
		SH	5	rd., brn., blky.
40 -	50	SS	60	rd., brn., org., ang./subrnd., w. org.-rd., SH void filler, ti.
		SH	35	dk.rd., blky.
		SLTST	5	org.-brn., sdy.
50 -	60	SLTST	70	org.,-brn., sdy., sl. calc.
		SS	20	wh., clr., org., brn., f./m.g., ang./subrnd., shly., calc., p. por.
		SH	10	rd., brn., blky.
60 -	70	SLTST	50	org.-rd., v. sdy., sl. calc.
		SS	30	a.a.
		SH	20	a.a.
70 -	80	SH	60	rd., rd.-brn., mar., purp., blky., (hd. clyst.)
		SLTST	30	org.-brn., sdy.
		SS	10	a.a.
80 -	90	SLTST	45	a.a.
		SH	30	a.a.
		SS	25	a.a.
90 -	2900	SS	60	rd.-brn., org.-brn., s. wh., v.f./m.g., slty., grds. to sltst.
		SLTST	30	org.-brn., v. sdy.
		SH	10	rd., mar., blky.
2900 -	10	SS	65	org., org.-brn., wh., clr., f./m.g., ang./rd., calc., p. srt., lse./clus., p. por.
		SLTST	25	org.-brn.
		SH	10	rd., rd.-brn., purp.
10 -	20	SLTST	60	org.-brn., sdy., mica.
		SS	30	a.a.
		SH	10	a.a.
20 -	30	SLTST	50	org.-brn., sdy., mica.
		SS	40	a.a.
		SH	10	a.a.
30 -	40	SS	60	rd., ord., wh., clr., f./m.g., w.s.c. gs., ang./rd., p. srt., calc., mica., lse./clus., p. por.
		SLTST	30	rust-brn., org.-brn.
		SH	10	rd., rd.-brn., purp.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

2940 - 50	SLTST	70	rust-brn., sdy., mica., calc.
	SH	20	rd., rd.-brn., mica., blky., calc.
	SS	10	a.a.
50 - 60	SLTST	80	rust-brn., sdy., mica., calc.
	SH	15	rd., purp., mar., blky.
	SS	5	a.a.
60 - 70	SLTST	75	a.a.
	SH	20	a.a.
	SS	5	a.a.
70 - 80	SH	80	rd.-brn., rd., blky., v. mica., sl. calc.
	SLTST	20	rust/rd.-brn., mica. loc., calc.
80 - 90	SH	70	rd.-brn., blky./plty., mica., sl. calc.
	SLTST	30	a.a.
90 - 3000	SLTST	70	rust/rd.-brn.
	SS	30	wh., clr., gy., f./m.g., ang./s. rd., calc.
3000 - 10	SLTST	70	rust/rd.-brn., calc., v. mica., sdy.
	SS	30	wh., gy., rd., f./m.g., ang./subrnd., p. srt., calc., slty. v. p. por.
10 - 20	SLTST	60	rust/rd.-brn., calc., v. mica., sdy.
	SS	40	wh., rd., f./m.g., ang./subrnd., p. srt., calc., slty.
20 - 30	SLTST	70	a.a.
	SS	20	a.a.
	SH	10	org., plty., wh. spks. (Kao.)
30 - 40	SLTST	60	rust/rd.-brn., calc., v. mica., sdy.
	SS	25	wh., gy., rd., f./m.g., ang./subrd., calc., p. por.
	SH	15	brn., rd., org., purp., blky./plty., calc./non.-calc.
40 - 50	SLTST	60	rust/rd.-brn., calc., v. mica., sdy.
	SS	25	wh., gy., rd., f./m.g., ang./subrd., calc., p. por.
	SH	15	brn., rd., org., purp., blky./plty., calc./non-calc.
50 - 60	SLTST	80	a.a.
	SS	10	a.a.
	SH	10	a.a.
60 - 70	SLTST	80	rust/rd.-brn., calc.
	SH	15	brn., rd., org., blky./plty.
	SS	5	a.a.
70 - 80	SS	55	org.-brn., v.f.g., ang., calc., v. slty., ti., clus./lse.
	SLTST	45	rust-org.-brn., calc., v. sdy.
80 - 90	SH	55	rd., rd.-brn., plty., mica., calc.
	SLTST	45	a.a.
90 - 3100	SLTST	35	a.a.
	SH	35	a.a.
	SS	30	wh., v.f./f.g., ang., calc., lse./s. clus., p. por

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

3100 -	10	SLTST	80	rust-brn., v. mica., sdy.
		SH	10	rd., blky.
		SS	10	wh., rd., org., f./m.g., s.c.g.
10 -	20	SLTST	80	a.a.
		SS	20	a.a.
20 -	30	SLTST	40	a.a.
		SS	35	rd., org., s. wh., f.g., s.m.g., v. slty., ti., lse.
		SH	25	rd., rd.-brn., org.
30 -	40	SLTST	50	rust/rd.-brn., mica., sdy., calc.
		SH	35	rd., rd.-brn., org., calc., blky./plty.
		SS	15	gy., wh., org., f./m.g., p. srt., arg., calc., Kao., ti.
40 -	50	SH	55	rd., rd.-brn., org., calc., blky./plty.
		SLTST	45	rust/rd.-brn., mica., sdy., calc.
50 -	60	SH	55	a.a.
		SLTST	45	a.a.
60 -	70	SS	65	wh., rd., org., v.f./f.g., v. slty., calc., loc. abd. Kao.
		SH	25	rd.-brn., rd., mar., gy., blky.
		SLTST	10	a.a.
70 -	80	SH	70	rd.-brn., rd., gy., mar., blky., calc.
		SS	20	wh., s. clr., f./m.g., calc.
		SLTST	10	rust-brn., sdy.
80 -	90	SH	80	rd.-brn., rd., mar., purp., blky./plty., calc., mica.
		SS	10	a.a.
		SLTST	10	a.a.
90 -	3200	SH	80	rd.-brn., rd., mar., calc., mica.
		SS	10	wh., clr., f./m.g., calc.
		SLTST	10	rust-brn., sdy.
3200 -	10	SS	80	rust-brn., v.f.g., calc., v. slty., ti.
		SH	20	rd.-brn., rd., blky./plty., calc.
10 -	20	SS	80	a.a.
		SH	20	a.a.
20 -	30	SS	90	rust-brn., wh., v.f./f.g., mica., calc., v. slty., ti.
		SH	10	rd.-brn., calc.
30 -	40	SS	90	rust-brn., wh., v.f./f.g.
		SH	10	rd.-brn., calc.
40 -	50	SS	80	org.-brn., rust, wh., v.f./f., calc., slty., p. por./ti.
		SH	20	org., rd., mar., purp., blky., plty., calc., s.w. wh. Kao. spks.
50 -	60	SH	50	a.a.
		SS	50	a.a.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

3260 - 70	SS	70	wh., lt.org., org.-brn., v.f./s.m.g., calc., arg., clus., ti. p. por.
	SH	30	rd., brn., mar., org.
70 - 80	SH	60	rd., rd.-brn., mar., org. w. wh. spks., (Kao.), calc.
	SS	40	a.a.
80 - 90	SLTST	50	rd.-brn., v. sdy., calc.
	SH	40	rd., rd.-brn., mar., wh. Kao. spks., calc.
	SS	10	a.a.
90 - 3300	SH	50	a.a.
	SLTST	40	a.a.
	SS	10	lt.org., wh., rd., f./m.g., ang./subrd., p. srt., arg., ti.
3300 - 10	SH	80	rd., rd.-brn., plty., blky., s. v. mica., calc.
	SLTST	20	rust-brn., calc.
10 - 20	SH	85	a.a.
	SS	15	rd., wh., f./m.g., mica., calc., ti./p. por.
20 - 30	SH	80	rd.-brn., rd., org.-brn., mica.
	SLTST	20	rd.-brn.
30 - 40	SH	70	rd.-brn., org.-brn., mica.
	SLTST	30	rd.-brn.
40 - 50	SLTST	70	rust-brn., org.-brn., sdy., mica., calc.
	SS	20	org., wh., clr., rd., v.f./m.g., s.c.g., calc., lse./s. clus., ti./p. por.
	SH	10	a.a.
50 - 60	SLTST	65	a.a.
	SS	35	wh., org., f.g., s.m.g., fr. srt., fr. por.
60 - 70	SLTST	65	rust-brn., org.-brn., sdy., mica., calc.
	SS	35	org., wh., clr., rd., v.f./m.g.
70 - 80	SH	60	rd., rd.-brn., purp., mar., plty., blky., mica., calc.
	SLTST	30	a.a.
	SS	10	a.a.
80 - 90	SLTST	80	rd.-brn., sdy., mica.
	SH	15	a.a.
	SS	5	pk., rd., wh., f.g., calc.
90 - 3400	SS	60	rd., clr., f.g., ang./subang., s. rnd., lse.
	SLTST	40	a.a.
3400 - 10	SH	60	rd., rd.-brn., org. w. wh. spks., (Kao.)
	SLTST	20	rd.-brn., sdy.
	SS	20	wh., gy., v.f./f.g., ang./subang., Calc. & Kao. void filler
10 - 20	SH	60	a.a.
	SLTST	40	a.a.
20 - 30	SS	80	clr., wh., s. rd., f./m.g., ang., calc., s. Kao., p. por.
	SH	20	rd., rd.-brn.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

3430 - 40	SS	60	wh., clr., lt.org., f./m.g., ang./subang., calc., lse./s. clus., p. por.
	SH	40	rd., rd.-brn., blky.
40 - 50	SS	90	wh., clr., lt.org., f./m.g., ang./subang., calc., sl. Kao., lse./s. clus., f. por.
	SH	10	a.a.
50 - 60	SS	90	a.a.
	SH	10	a.a.
60 - 70	SH	60	rd., rd.-brn., mar., blky. sl. calc.
	SS	30	wh., clr., org./brn., f./m.g., slty., calc., kao., p. por.
	SLTST	10	org.-brn., calc.
70 - 80	SH	90	rd., rd.-brn., blky., s. plty., sl. calc., loc. slty.
	SS	10	rd., org., f./m.g., calc., v. arg., ti.
	LS	TR	rd.-brn., crpxln., v. arg., sl. sdy.
80 - 90	SH	90	a.a.
	SS	10	a.a.
	LS	TR	a.a.
90 - 3500	SH	60	rd., rd.-brn., mar., blky., sl. calc.
	SS	40	rd., rd.-dk. brn., f.g., ang., calc., w. cly. void filler, ti.
3500 - 10	SS	80	rd., rd.-dk.brn., f.g., ang., calc., w. cly. void filler, ti.
	SH	20	rd., rd.-brn., sl. calc.
10 - 20	SS	100	org., rd.-brn., s. wh., v.f./f.g., ang./subang., calc., slty., ti.
20 - 30	SLTST	70	rd.-brn., sdy., mica.
	SS	30	a.a.
30 - 40	SS	90	org., rd.-brn., s. wh., v.f./f.g., ang./subang., calc., slty., ti.
	SLTST	10	a.a.
40 - 50	SS	90	crm., wh., org., v.f./f.g., ang./subrnd., v. calc., kao., ti.
	SLTST	10	rd.-brn., org.-brn.
50 - 60	SS	40	a.a.
	SH	40	rd.-brn., rd., mica., sl. calc.
	SLTST	20	rd.-brn.
60 - 70	SS	60	rd.-brn., org.-brn., v.f./f.g., ang./subang., calc., cly., ti.
	SH	40	rd.-brn., rd., blky., mica., sl. calc.
70 - 80	SS	55	rd.-brn., org.-brn., v.f.g., calc., cly., ti.
	SH	45	a.a.
80 - 90	SLTST	45	rd.-brn., calc.
	SH	40	rd.-brn., blky., s. plty., sdy.
	SS	15	rd., pk., v.f./f.g., ang., calc., ti.
90 - 3600	SH	50	rd., rd.-brn., mar., blky.
	SLTST	40	a.a.
	SS	10	a.a.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

3600 - 10	SS	85	rd., org.-brn., v.f.g., calc., v. arg., ti.
	SH	10	rd.-brn., rd.
	LS	5	rd.-brn., crptoxln., v. arg.
10 - 20	SS	80	a.a.
	SH	20	a.a.
20 - 30	SS	60	a.a.
	SLTST	30	rd.-brn., org.-brn., v. sdy.
	SH	10	rd., rd.-brn., blky.
30 - 40	SS	60	rd.-brn., s. wh., v.f./f.g., calc., ti./p. por., NSOFC
	SLTST	30	a.a.
	SH	10	a.a., w. tr. LS
40 - 50	SS	60	rd.-brn., s. wh., v.f./f.g., calc., ti./p. por., NSOFC
	SLTST	30	rd.-brn., org.-brn., v. sdy.
	SH	10	rd., rd.-brn., blky., w. tr. LS
50 - 60	SH	60	rd., rd.-brn., mar., purp., mot., mica., calc.
	SLTST	30	a.a.
	SS	10	a.a.
60 - 70	SS	75	rd., m./c.g., ang./subrd., mica., calc., clus., w. s. vis. por., fr. por., NSOFC
	SH	25	rd., blky., calc.
	LS	TR	gy.-brn., rd.-brn., crptoxln.
70 - 80	SS	80	a.a.
	SH	20	rd., blky., calc.
80 - 90	SS	80	a.a.
	SH	20	rd., blky., calc.
90 - 3700	SS	60	a.a.
	SH	40	a.a.
3700 - 10	SS	80	wh., clr., f./s.m.g., ang./subang., fr. srt., fr. por.
	SH	20	rd.-brn.
10 - 20	SS	70	a.a.
	SH	30	rd.-brn., tr. mar.
20 - 30	SH	45	rd., rd.-brn., mar., mica., calc., w. tr. rd.-brn., dns. LS
	SLTST	45	org.-brn., calc.
	SS	10	a.a.
30 - 40	SH	55	a.a.
	SLTST	25	a.a.
	SS	20	org.-brn., gy., v.f.g., ang., v. cly., calc. ti.
40 - 50	SH	60	rd.-brn., mica., calc. slty.
	SS	40	wh., smky., rd.-org., f./m.g., ang./subang., lse., p. por., NSOFC
50 - 60	SH	70	rd.-brn., org.-brn., rd., mar., blky., mica., calc.
	SS	30	wh., clr., smky., rd., f./m.g., lse., p. por., NSOFC
	LS	TR	rd.-brn., crptoxln., v. arg.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

3760 - 70	SH	50	rd.-brn., rd., v. mica. loc., calc.
	SLTST	30	rd.-brn., mica.
	SS	20	wh., lt.gy., m.g., ang., mica., calc., wh. cly. void filler, ti.
70 - 80	SS	50	wh., rd., f./m.g., ang., mica., calc., v. arg.
	SH	40	rd., rd.-brn., mar., mica., calc.
	SLTST	10	rd.-brn.
	LS	TR	brn.
80 - 90	SS	60	wh., lt.gy., rd., f./m.g., ang., mica., calc., wh. cly., void filler, ti./p. por.
	SH	40	a.a.
90 - 3800	SS	70	a.a.
	SH	30	a.a.
3800 - 10	SH	60	rd., rd.-brn., calc.
	SS	40	wh., f.g., ang./subang., calc., abd. Kao., clus., ti.
10 - 20	SH	70	rd.-brn., plty., s. blky., calc.
	SLTST	30	rd.-brn., calc., sdy.
20 - 30	SLTST	75	lt.brn., calc.
	SH	25	rd.-brn.
30 - 40	SLTST	80	lt.brn., rd.-brn., calc., sdy.
	SH	20	rd., rd.-brn., mica.
40 - 50	SLTST	80	rd.-brn., lt.brn., calc. v. sdy., loc.
	SH	20	rd., rd.-brn., sl. calc.
50 - 60	SLTST	40	a.a.
	SS	40	lt.gy./wh., tan., f./s.m.g., ang./subrnd., sil. cmt., p. por., NSOFC
	SH	20	a.a.
60 - 70	SS	90	rd., lt.gy., tan, m.g., ang./subang., clus. w. fr./p. por., NSOFC
	SLTST	10	rd.-brn., mar., mica.
70 - 80	SS	100	rd., wh., clr., brn., gy., m.g., ang./subang., clus., p./tr. fr. por., NSOFC
80 - 90	SS	70	a.a.
	SH	30	rd., rd.-brn., blky./plty., sl. calc.
90 - 3900	LS	60	gy.-brn., rd.-brn., crptoxln., arg.
	SH	40	a.a.
3900 - 10	SH	90	rd.-brn., gy.-brn., blky., plty., s. fis., mica.
	SLTST	10	rd.-brn., sl. calc.
	LS	TR	a.a.
10 - 20	SLTST	55	a.a.
	SH	40	a.a.
	LS	5	rd.-brn., arg.
20 - 30	SLTST	60	a.a.
	SH	30	rd., rd.-brn., gy., mar.
	LS	10	gy.-brn., rd.-brn., crptoxln., arg.
30 - 40	SLTST	50	rd.-brn., rust, sdy., sl. calc.
	SH	45	a.a.
	LS	5	a.a.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

3940 - 50	SS	55	rd./lt.org., wh., f./m.g., ang./s. rd., calc., sl. kao., clus./s. lse., ti./fr. por., NSOFC
	SH	45	a.a.
50 - 60	SS	100	lt.org., wh., rd., m./s.c.g., ang./subrnd., calc., pyr., gd. intgran. por., voids coated w. cly., NSOFC
60 - 70	SS	55	org.-brn., v.f.g., ti.
	SH	45	rd.-rd.-brn., mar., purp.
70 - 80	SH	60	a.a.
	SS	40	org.-brn., wh., v.f./f.g., calc., kao., p. por./ti., NSOFC
80 - 90	SH	60	rd., rd.-brn., plty./blky.
	SLTST	40	org.-brn., lt.org., sdy. loc.
90 - 4000	SH	60	a.a.
	SLTST	40	a.a.
4000 - 10	SLTST	60	rd.-brn., org.-brn., calc., sdy.
	SH	35	rd., gy., rd.-brn., blky./plty.
	LS	5	rd.-brn., gy.-brn., crptoxln.
10 - 20	SLTST	80	rd.-brn., gy.-brn., v. calc. sdy., mica.
	SH	20	a.a.
20 - 30	SH	95	rd.-brn., rd., blky.
	LS	5	gy.-brn., rd.-brn., crptoxln.
30 - 40	SS	60	lt.org./wh., clr., pk., f./m.g., ang., calc., clus., sl. sil., p./fr. intgran. por., w. dd. O res., NSOFC
	SH	40	a.a.
40 - 50	SS	100	lt.org., wh., clr., m./c.g., ang./s. rnd., sl. calc., sl. sil., clus., p./fr. intgran. por., w. dd. O res., NSOFC
50 - 60	SS	100	lt.org., wh., pk., f./m.g., ang./subang., sl. calc., sl. sil., ti./p. por., NSOFC
60 - 70	SS	100	a.a.
70 - 80	SH	70	rd.-brn.
	SS	30	a.a.
80 - 90	SS	60	rd., org., wh., m.g., ang./subrnd., w. cly. coating in voids., p. por., NSOFC
	SH	40	rd., rd.-brn., dk.gy.-brn., blky., mica.
90 - 4100	SLTST	70	dk.rd.-brn., calc., loc. sdy.
	SH	30	a.a.
4100 - 10	SH	60	brn., gy.-brn., rd., slty., calc., loc. lmy.
	SLTST	40	rd.-brn./gy.-brn.
10 - 20	SS	70	org.-brn., v.f.g., calc., ti.
	SS	30	rd., gy.-brn., mar., mica., calc.
20 - 30	SLTST	60	rd.-brn./dk.gy.-brn., mica.
	SH	30	a.a.
	SS	10	org., rd., wh., f./m.g., ang./subang., sl. calc., lse./clus., p. por., NSOFC
30 - 40	SS	100	rd., f./m.g., ang./subang., p. srt., abd. koa. void filler, ti./p. por., NSOFC

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

4140 - 50	SS	55	a.a.
	SH	45	rd., blky., calc.
50 - 60	SS	50	a.a.
	SH	50	rd., mar., rd.-brn., mica., sl. calc.
60 - 70	SH	80	a.a.
	SS	20	org., rd., wh., v.f.g., ang./subang., sl. calc., shly., slty., ti.
70 - 80	SH	80	rd., mar., gy.-brn., mica., slty., calc.
	SS	20	org., rd., v.f./f.g., ang./subang., kao., slty., ti.
	LS	TR	rd.-brn., crptoxln.
80 - 90	SH	80	rd.-brn., dk.gy.-brn., mica., calc.
	LS	20	gy.-brn., crptoxln., sl. sdy., sl. mica. (mdst.)
90 - 4200	SH	70	a.a.
	SS	25	wh., clr., m.g., ang., sl. calc., cly., lse.
	LS	5	a.a.
4200 - 10	SS	60	rd., wh., m.g., ang./subang., cly. coating voids, p./fr. por.
	SH	40	rd., rd.-brn., s. dk.gy.-brn., purp.
10 - 20	SH	90	a.a.
	SS	5	rd., wh., f./m.g., ang./subrd., p. por., NSOFC
	LS	5	gy.-brn., crptoxln., arg.
20 - 30	SH	70	a.a.
	SS	20	wh., rd., clr., m.g., ang./subang., lse.
	LS	10	gy.-brn., crptoxln.
30 - 40	SLTST	80	org.-brn., brn., loc. sdy., sl. calc.
	SS	20	a.a.
40 - 50	SLTST	80	a.a.
	SH	20	brn., rd., blky., calc.
50 - 60	SLTST	75	a.a.
	SH	15	a.a.
	LS	10	gy.-brn., crptoxln./microxln.
60 - 70	SH	50	a.a.
	SLTST	40	a.a.
	LS	10	a.a.
70 - 80	SH	70	rd., rd.-brn., s. gy.-brn., loc. v. slty., calc., mica.
	SS	25	wh., rd., crm., f./m.g., ang./subang., lse./clus., p. por., NSOFC
	LS	5	a.a.
80 - 90	SS	90	wh., clr., rd., m.g., ang./subrnd., abd. Kao., p./fr. por., NSOFC
	SH	10	a.a.
90 - 4300	SS	60	a.a.
	SH	40	rd., rd.-brn., s. gy.-brn., calc., mica.
4300 - 10	SS	60	wh., org., clr., s. rd., m.g., ang./ subang., calc., wh. cly., coating on void walls, fr. por., NSOFC
	SH	40	rd.-brn., gy.-brn., slty., mica., bkly., calc.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

4310 - 20	SH	70	rd.-brn., slty., mica., bkly., calc.
	SS	20	wh., rd., org., f./s.m.g., ang./subang., calc., lse./s. clus.
	LS	10	gy.-brn., rd.-brn., crptoxln., loc. v. arg. (mdst.)
20 - 30	SH	60	rd.-brn., dk.gy.-brn., slty., mica., calc., loc. v. sdy.
	LS	40	dk.gy.-brn., s. rd.-brn., crptoxln., v. arg. (mdst.)
30 - 40	SLTST	90	rd.-brn., loc. sdy.
	SH	10	a.a.
40 - 50	SLTST	90	a.a.
	SH	10	a.a.
50 - 60	SH	70	rd.-brn., rd., purp., loc. slty., calc., sl. mica.
	SS	30	wh., clr., f./m.g., ang., p. srt., lse.
	LS	TR	gy.-brn., crptoxln.
60 - 70	SS	100	wh., clr., rd., m./s.c.g., ang./subrnd., wh. cly. coating on void walls, fr./g. intgran. por., NSOFC
70 - 80	SH	55	rd., rd.-brn., blky., plty., f. mica.
	SS	45	a.a.
80 - 90			N.S.
90 - 4400	SS	60	wh., rd., m./c.g., ang./subang., lse./s. clus., wh. cly. coating on voids, f./g. por., NSOFC
	SH	40	rd., brn., dk.gy.-brn., blky./plty.
4400 - 10	SH	70	rd.-brn., plty./blky., v. mica.
	SS	25	wh., lt.gy., pk., s&p, mica., calc., ti.
	LS	5	gy.-brn., rdish.-gy., crptoxln.
10 - 20	SH	70	a.a.
	LS	30	lt.gy.-tan, gy.-brn., microxln./v.f. suc., ool./pel., crin., dns. (mdst./wkst.)
20 - 30	LS	80	lt.gy.-tan/brn., mot. gy.-brn., f. suc., microxln./f. xln., ool./pel., crin., v. fos. (wkst.=wackestone)
	SH	20	a.a.
30 - 40	LS	100	wh., lt.gy.-tan, mot. gy.-brn., v.f. suc./microxln./f. xln., ool., pel., crin., v. fos. (wkst.)
40 - 50	LS	100	a.a.
50 - 60	LS	70	a.a., w. frag. rd.-brn., SH
	SH	25	rd.-brn., dk.gy.-brn., blky./plty., calc. mica.
	SS	5	wh., lt.gy., s&p, v.f./f.g., ang./subang., calc., p. por., NSOFC
60 - 70	SH	65	rd.-brn., s. dk.gy.-brn., plty./s. fis., calc., mica.
	LS	30	gy.-brn., microxln., decr. ool.-fos., slty.
	SS	5	wh./tan, v.f.g., calc., ti.
70 - 80	SLTST	50	rd.-brn., mica., calc., sdy.
	SH	45	rd.-brn., dk.gy., brn., calc., mica.
	SS	5	a.a.
80 - 90	SS	45	wh., pk., rd., v.f./f.g., ang., mica., calc., sl. cly., p. por., NSOFC
	SH	40	rd.-brn., gy.-brn., rd.
	LS	15	gy.-brn., wh., crptoxln., v.f. suc.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

4490 - 4500	LS	50	gy-brn., wh./lt.gy.-tan, microxln., v.f. suc., ool., fos. (mdst./wkst.)
	SH	40	a.a.
	SS	10	a.a.
4500 - 10	LS	60	lt.gy.-brn., wh., dk.gy., crptoxln./v.f. suc., sl. fos. (mdst.)
	SH	40	rd.-brn., blk., v. mica., calc.
10 - 20	LS	55	lt.gy.-brn., wh., dk.gy., crptoxln./v.f. suc., sl. sdy. (mdst.)
	SH	45	rd.-brn., blk., v. mica., calc.
20 - 30	LS	95	lt.gy., gy.-brn., dk.gy., mot., microxln./v.f. suc., foss., ool./pel., crin., brac., (pkst.), frac. w. dd. 0 res.
	SH	5	blk., fis., calc., mica.
30 - 40	LS	95	a.a. (pkst./mdst.)
	SH	5	a.a.
40 - 50	LS	95	a.a.
	SH	5	a.a.
50 - 60	LS	60	crm., tan, gy.-brn., v.f. suc./microxln., (mdst.), dns.
	SH	25	rd.-brn., blk., plty., blky., fis., calc.
	SS	15	wh., rd., v.f./f.g., ang./subang., calc., lse./clus., ti.
60 - 70	SS	60	tan, v.f./f.g., calc./lmy., mica., ti./p. por., NSOFC
	SH	30	rd.-brn., blk., gy.
	LS	10	lt.gy.-brn., crm., gy.-brn., microxln/v.f. suc., dns.
70 - 80	LS	60	tan, lt.gy.-brn., v.f. suc./microxln., v. sdy. loc. (wkst.)
	SH	40	a.a.
80 - 90	LS	70	a.a.
	SH	20	a.a.
	SS	10	wh., org., clr., f./m.g., lse.
90 - 4600	LS	90	wh., crm., lt.gy./dk.gy. mot., v.f. suc./microxln., ool./pel., foss., no vis. por. (mdst./pkst.)
	SH	10	a.a.
4600 - 10	LS	100	wh., lt.gy.-tan, gy.-brn., mot. loc., microxln./v.f. suc., mod. foss., (mdst./s. wkst.), dns.
10 - 20	LS	80	wh., gy.-brn., crptoxln./v.f. suc., mod./abd. fos., ool./pel., sdy., (mdst./pkst.), dns.
	SH	20	blk., gy., plty., mica., sl. calc., v.f. carb.
20 - 30	SS	70	gy., v.f./f.g., subang./subrnd., p. srt., mica., v. calc., ti.
	LS	20	a.a.
	SH	10	blk., blky., mica., sl. calc.
30 - 40	LS	80	gy.-brn., mot., crm., crptoxln./v.f. suc., (mdst./wkst.), dns.
	SH	15	a.a.
	SS	5	a.a.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

4640 - 50	SS	50	brn., wh., v.f.g./f.g., v. calc., v. arg., mica., ti.
	LS	30	gy.-brn., microxln./v.f. suc., loc. v. sdy., s. fos., dns.
	SH	20	blk., dk.gy.-brn., blky./plty., carb., sdy.
50 - 60	SS	70	brn./tan., v.f.g./slt., v. calc., carb. spks., ti.
	LS	25	dk.gy.-brn., lt.brn., microxln., loc. arg., (mdst./wkst.), dns.
	SH	5	a.a.
60 - 70	LS	45	a.a.
	SS	40	a.a.
	SH	15	a.a.
70 - 80	LS	90	dk.gy.-brn., lt.brn., microxln., arg. (mdst./wkst.)
	SH	10	a.a.
80 - 90	LS	60	gy.-brn., lt.brn., crm., crptoxln./v.f. suc., sdy., dns.
	SS	40	brn., v.f.g./slt., calc., arg., ti.
90 - 4700	SS	45	wh., crm., f.g., ang., w. srt., sl. calc., p./fr. por., NSOFC
	LS	30	a.a.
	SH	25	blk., dk.gy.-brn., blky./plty., carb., sdy.
4700 - 10	SS	35	wh., clr., org., f./m.g., ang., calc., lse./clus. p. por.
	SH	35	rd.-brn., dk.gy., blk., blky.
	LS	30	a.a.
10 - 20	SS	95	wh., clr., m.g., s.c.g., ang./subrnd., spt. wh. cly., g. por.
	SH	5	a.a.
20 - 30	SS	75	a.a.
	SH	20	rd., blk., gy., blky.
	LS	5	gy., lt.gy.-brn., microxln.
30 - 40	SS	100	wh., clr., m.g./c.g., ang./subrnd., abd. kao., f./g. por., NSOFC
40 - 50	LS	70	wh., crm., lt.brn., dk.gy.-brn., v.f.suc./crptoxln., (mdst.), dns.
	SH	30	blk., plty., calc.
50 - 60	SS	70	tan, org., f./m.g., ang./subrnd., calc., clus./lse., p. por., NSOFC
	SH	30	a.a.
60 - 70	SS	35	lt.brn., v.f.g., arg., calc., ti.
	SH	35	blk., brn., plty., calc.
	LS	30	lt.gy., crptoxln.
70 - 80	SS	60	wh., org., ang./subang., abd. Kao., ti.
	SH	40	a.a.
80 - 90	SS	60	a.a. V.P.S. - L.C.M.
	SH	40	a.a.
90 - 4800	SS	60	a.a. V.P.S. - L.C.M.
	SH	40	a.a.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

4800 - 10	SS	45	wh., org., v.f./m.g., p. srt., ang./subrnd., calc., cly., p. por., NSOFC
	SH	35	blk., rd., rd.-brn., mica., calc., blky.
	LS	20	lt.gy.-tan, gy.-brn., crptoxln. (mdst.)
10 - 20	LS	45	crm., wh., lt.gy.-tan, v.f. suc./crptoxln., loc. v. sdy. (mdst.)
	SH	35	a.a.
	SS	20	a.a.
20 - 30	LS	80	lt.gy.-brn., microxln./v.f. suc., sl. fos. & ool., dns. (mdst.)
	SH	20	dk.gy., blk., mica., carb.
30 - 40	SH	65	dk.gy.-brn./blk./m.g., blky.
	LS	35	lt.brn., crptoxln.
40 - 50			N.S. Lost Circ.
50 - 60			N.S. Lost Circ.
60 - 70	SS	60	gy./gy.-brn., wh., crm., v.f./f.g., lmy., ti.
	LS	25	dk.gy.-brn./brn., microxln./s.m. xln., arg., loc. v. sdy., sl. fos., (pkst.), dns.
	SH	15	dk.gy.-brn./blk., calc. blky., m. hd.
70 - 80	SS	60	a.a.
	LS	25	a.a.
	SH	15	a.a.
80 - 90	SLTST	55	blk., dk.gy., sdy., calc., blky.
	SH	35	dk.gy.-brn., blk., blky., calc.
	LS	10	a.a.
90 - 4900	SS	75	dk.gy., gy.-brn., wh., f.g., mica., calc., carb., shly., ti.
	SH	15	dk.gy./blk., blky./plty., calc.
	LS	10	gy.-brn., lt.brn., microxln., foss., ool./pel., loc. sdy., dns. (mdst./wkst.)
4900 - 10	SS	70	gy./gy.-brn., v.f./f.g., v. shy., carb., mica., calc., ti.
	SLTST	25	dk.gy./gy.-brn., v. calc., hd., loc. sdy.
	LS	5	a.a.
10 - 20	SLTST	60	a.a.
	LS	30	dk.gy.-brn., crptoxln., v. arg., loc. sdy. (mdst.)
	SH	10	gy.-brn., plty./fis., sl. mica., calc.
20 - 30	SS	45	gy./gy.-brn., v.f./f.g., arg., sl. carb., mica., calc., ti.
	SH	35	a.a.
	LS	20	a.a.
30 - 40	SS	45	gy./gy.-brn., v.f./f.g., arg., sl. carb., mica., calc., ti.
	SH	30	gy.-brn., plty./fis., sl. mica., calc.
	LS	25	dk.gy.-brn., crptoxln., v. arg., loc. sdy. (mdst.)
40 - 50	LS	85	dk.gy.-brn., gy.-brn., crptoxln., v. arg., dns. (mdst.)
	SS	15	a.a.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

4950 - 60	LS	75	dk.gy.-brn., brn., crptoxln., v.v. arg., dns. (mdst.)
	SH	20	dk.gy.-brn., v. calc./lmy., blky., hd.
	SS	5	a.a.
60 - 70	LS	80	a.a.
	SH	20	a.a.
70 - 80	LS	80	dk.gy.-brn./lt.brn., crptoxln., arg., sl. ool. (mdst./s. wkst.)
	SH	20	dk.gy.-brn., v. calc./lmy., blky., hd.
80 - 90	LS	80	lt.brn./crm., dk.gy.-brn., crptoxln., v.f. suc., sl. ool., (mdst./s. wkst.), dns.
	SH	20	brnish-blk., calc., hd./mod. hd.
90 - 5000	LS	90	lt.brn., s. crm., dk.gy.-brn., crptoxln., s.v.f. suc., ool./pel., occ. fos., (mdst./occ. pkst.) dns.
	SH	10	a.a.
5000 - 10	SH	70	brnish.-blk., blky./plty., calc./loc. lmy., carb.
	LS	30	gy.-brn., dk.gy.-brn., tan, crptoxln./s.v.f. suc., occ. ool./pel., loc. arg., (mdst./occ. pkst.), dns.
10 - 20	LS	75	lt.brn., crm., dk.gy.-brn., mot., microxln./f. xln., v.f. suc., ool./pel., sh. pel. abd. fos.-brac., crin., ost., (pkst./mdst.), p. por., NSOFC
	SH	25	a.a.
20 - 30	LS	70	a.a.
	SH	30	a.a.
30 - 40	LS	90	dk.gy.-brn./brnish.-blk., s. crm., crptoxln., s.v.f. suc., arg., (mdst.), dns.
	SH	10	brnish.-blk., blky./plty., carb., calc.
40 - 50	LS	95	dk.gy.-brn./brnish.-blk., crm., crptoxln., v.f. suc., sl. arg., occ. fos. frag., loc. sdy., (mdst.), dns.
	SH	5	a.a.
50 - 60	LS	95	a.a.
	SH	5	a.a.
60 - 70	LS	95	a.a.
	SH	5	a.a.
70 - 80	LS	80	gy.-brn., crm., s. mot., crptoxln., s.f. xln., s.v.f. suc., sdy. loc., loc. fos., ool./pel., p. intxln. por., NSOFC
	SS	20	clr., wh., v.f./f.g., ang./subrd., s. calc. clus., lse.
80 - 90	SS	45	gy., wh., clr., rd., v.f./m.g., ang./rnd., p. srt., shly., calc., ti./p. por., NSOFC
	SH	40	gy., brnish.-blk., calc., blky.
	LS	15	a.a.
90 - 5100	LS	60	dk.gy.-brn., crptoxln., dns.
	SH	40	brnish.-blk., blky., calc., loc. sdy., lmy.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

5100 - 10	LS	65	gy.-brn./dk.gy.-brn., crptoxln., dns.
	SH	35	blk., dk.gy.-brn., calc., mica., loc. slty.
10 - 20	LS	50	a.a.
	SH	40	a.a.
	SS	10	wh., clr., m.g., ang./subrnd., calc., mica., ti./s.p. por.
20 - 30	LS	60	gy.-brn., crptox., dns.
	SH	25	blk., dk.gy.-brn., calc., mica., loc. slty. & sdy.
	SS	15	wh., clr., dk.gy., f./m.g., ang./subang., calc., shly.
30 - 40	LS	60	lt.gy.-brn., s. dk.gy.-brn., microxln., sl. ool., s. sl. sdy., dns.
	SH	30	a.a.
	SS	10	a.a.
	20 Min. Circ.:		LS 80 dk.gy.-brn., brn., tan/crm., microxln., suc./f. xln., s.v. ool., fr., intxln. & tr. moldic por., (ool. pkst. w. mud recrystallized.), NO STN., NO FLUOR., crushed por. chips give PALE-YEL. RESID. CUT FLUOR., TR. DD. O.
	50 Min. Circ.:		a.a., decre. in ool. LS
40 - 50	LS	75	crm./buff, lt.brn., microxln./s. chky., sl. sdy., dns.
	SH	25	blk., mica., blky., carb.
50 - 60	LS	75	crm./buff, lt.brn., microxln./s. chky.
	SH	25	blk., mica., blky., carb.
60 - 70	LS	90	a.a.
	SH	10	a.a.
70 - 80	LS	95	gy.-brn., buff, microxln./chky., arg., dns.
	SH	5	blk., loc. lmy.
80 - 90	LS	95	a.a.
	SH	5	a.a.
90 - 5200	LS	60	lt.gy.-brn./buff, dk.gy.-brn., microxln./chky., loc. sdy., dns.
	SH	40	blk., blky., v. calc./lmy.
5200 - 10	LS	55	dk.gy.-brn./brn., buff, microxln./chky., loc. v. arg.
	SH	45	blk. v. calc., tr. foss.-brac., lmy.
	SS	TR	wh., clr., m.g., ang.
10 - 20	SH	40	blk., plty., calc.
	LS	40	dk.gy.-brn./brn., s. tan, microxln., s. sl. chky., arg.
	SS	20	buff, gy., wh., clr., v.f./m.g., ang./rnd., calc., cly., ti.
20 - 30	SH	45	a.a.
	LS	35	a.a.
	SS	20	a.a.
30 - 40	LS	55	gy.-brn., buff., microxln./s. chky., dns.
	SH	25	blk., blky., calc.
	SS	20	wh., clr., f./m.g., ang./subrnd., lse.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

5240 - 50	LS	60	dk.gy.-brn., s. buff., microxln./s. sl. chky., arg., dns.
	SH	40	blk., blky., v. calc., sl. carb.
50 - 60	LS	85	dk.gy.-brn./brnish.-blk., s. buff., microxln., loc. v. arg./shly.
	SH	15	blk., blky., v. calc./lmy.
60 - 70	LS	85	dk.gy.-brn./brnish.-blk., s. buff, microxln., v. arg., sl. sdy.
	SH	15	a.a.
70 - 80	LS	75	dk.gy.-brn./brnish.-blk., s. buff, microxln., v. arg.
	SH	25	blk., blky., v. calc./lmy.
80 - 90	LS	80	a.a.
	SH	20	a.a.
90 - 5300	LS	80	a.a. - v. arg.
	SH	20	a.a. - v. lmy. (marlst.)
5300 - 10	LS	60	brnish-blk., gy.-brn., microxln., v. arg.
	SH	40	blk., brnish.-blk., blky., v. calc./lmy.
10 - 20	LS	80	lt.gy.-brn., buff, microxln./chky., dns.
	SH	20	a.a.
20 - 30	LS	90	gy.-brn./s. buff, microxln., s. sl. chky., dns., sl. foss.
	SH	10	blk., plty./blky., calc.
30 - 40	LS	60	dk.gy.-brn., s. buff, microxln., s. sl. chky., dns.
	SH	40	blk., blky., v. calc., foss.
40 - 50	SH	60	blk., plty./blky., calc.
	LS	35	gy.-brn., lt.brn., microxln., s. arg. dns. (mdst.)
	SS	5	lt.gy., v.f./f.g., calc., ti.
50 - 60	LS	70	dk.gy.-brn., microxln., arg., dns. (80%); lt.brn./buff, suc./f. xln., microxln., foss., (20%); <u>10% of 20% w. fr. intxln./suc. por. w. few small vugs. NSOFC - s. dd. 0</u> (wkst.-recrystallized.)
	SH	30	blk., blky., calc., carb.
60 - 70	LS	80	lt.brn./buff, microxln./v.f. suc./chky., dns. (mdst.)
	SH	20	blk., blky., calc.
70 - 80	LS	90	gy.-brn., buff, dk.gy.-brn., microxln., s. chky., dns. (mdst.)
	SH	10	a.a.
80 - 90	LS	90	a.a.
	SH	10	a.a.
90 - 5400	LS	70	dk.gy.-brn., microxln., v. arg., dns. (mdst.)
	SH	30	blk., carb., calc.
5400 - 10	LS	70	gy.-brn./buff, microxln., s. chky., (wkst.), dns., <u>NSOFC</u>
	SH	30	blk., carb., pyr., calc.
10 - 20	SS	65	gy., v.f./f.g., ang., calc., mica., v. arg., ti.
	SH	35	a.a.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

5420 - 30	LS	85	dk.gy.-brn., s. buff, microxln./s. chky., arg. (mdst.)
	SH	15	a.a.
30 - 40	LS	90	a.a.
	SH	10	a.a.
40 - 50	LS	90	dk.gy.-brn., brnish.-blk., s. lt.brn./buff, microxln., arg., dk.gy.-brn. cht., foss. (mdst./wkst.)
	SH	10	blk., carb., calc.
50 - 60	LS	50	wh./dk.gy., mot., f./m. xln., v. fos., pel./s. ool., arg., tr. cht., tr. oomol. por., v.p. por./ti., (pkst.), NSOFC
	SH	50	blk., v. carb., calc.
60 - 70	SH	60	blk., v. carb., calc.
	LS	40	a.a.
70 - 80	LS	90	gy.-brn., microxln., arg., dns. (mdst.)
	SH	10	a.a.
80 - 90	LS	70	gy.-brn., microxln., v. arg., dns. (mdst.)
	SH	30	a.a.
90 - 5500	LS	70	dk.gy.-brn./gy.-brn., buff, microxln., dns. (mdst.)
	SH	30	a.a.
5500 - 10	LS	95	lt.gy.-brn., buff, microxln., s. chky., tan cht., (mdst.), foss., dns.
	SH	5	blk., plty., carb., calc.
10 - 20	LS	90	lt.gy.-brn., buff, microxln., s. chky., lt.gy.-brn. cht., foss., (mdst./s. wkst.), dns.
	SH	10	blk., plty., carb., calc.
20 - 30	LS	95	lt.gy.-brn., lt.gy., microxln., s. chky., tr. lt.gy.-brn. cht., loc foss., (mdst./s. wkst.), dns.
	SH	5	a.a.
30 - 40	LS	95	lt.gy., buff, gy.-brn., microxln./s. chky., tr. brn. cht., ool., foss.-crin., brac., (wkst./mdst.), dns.
	SH	5	a.a.
40 - 50	LS	85	buff, lt.gy.-brn., f. suc., (sft.), s. microxln., ool., pel., foss.-crin., p. intgran. w. tr. mol. por., NSOFC (wkst./s. mdst.)
	SH	15	blk., blky., calc., carb.
50 - 60	SH	60	blk., blky./plty., calc., carb., tr. shly. Anhy.
	LS	40	lt.gy.-brn./dk.gy.-brn., s. buff, microxln./s.v.f. suc., ool./pel., fos., p. por. (mdst./s. wkst.)
60 - 70	SH	75	blk., blky./plty., calc., carb.
	LS	25	a.a.
70 - 80	SH	70	blk., blky./plty., calc. carb.
	LS	30	gy.-brn., lt.brn./buff, mot., f. suc./microxln., tr. anhy. LS, ool./pel., foss., (mdst./wkst.), ti./p. por.
	ANHY	TR	

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

5580 - 90			N.S. Lost. Circ.
90 - 5600	LS	70	lt.brn./dk.gy.-brn., microxln., tr. pel., dns.
	SH	30	blk., blky., calc.
5600 - 10	LS	80	dk.gy.-brn., crm./buff, microxln./chky., tr. tan cht., s. ool./pel., loc. foss., (wkst./mdst.), dns.
	SH	20	blk., carb., calc.
10 - 18	LS	90	wh./crm., lt.brnish.-gy., f. suc./chky., microxln./f. xln., foss., - crin., spg. spic., sl. ool. & pel., cht., p. intgran. por. (20% of 90%); p. intxln. por. (5% of 90%), f. sm. vug. and chn. por. (5% of 90%), s. frac. por. (3% of 90%), abd. dd. 0, mdst./s. wkst.), NSOFC
	SH	10	blk., blky., calc.
18 - 20	LS	85	wh./crm., lt.brn., chky./f. suc., microxln., tan cht., sl. foss., tr. ool. & pel., p. intgran. por. (5% of 85%), s. dd. 0, NSOFC
	SH	15	a.a.
20 - 30	LS	85	buff, lt.gy.-brn., chky./f. suc., microxln., dns. (mdst.)
	SH	15	blk., calc., carb.
30 - 40	LS	95	buff, tan, chky., microxln., sl. foss., tan cht., dns. (mdst.)
	SH	5	blk., blky., carb.
40 - 50	LS	90	buff, tan, chky./f. xln., microxln., dns. (mdst.)
	SH	10	blk., blky., carb., calc.
50 - 60	SH	50	blk./brnish.-blk., blky., calc., carb.
	LS	50	a.a.
60 - 70	SH	55	brnish.-blk., plty./s. fis., calc., carb., sl. pyr.
	LS	45	buff/wh., lt.gy.-brn., s. dk.gy.-brn., v.f. suc./ microxln., loc. ool., tr. crin., dns. (mdst./wkst.)
70 - 80	SH	70	blk., blky./plty., calc., carb., mica., tr. pyr., loc. lmy.
	LS	30	a.a.
80 - 90	SH	90	blk., brnish.-blk., blky./plty., calc., v. carb., f. mica., tr. pyr.
	LS	10	a.a.
90 - 5700	SH	95	a.a.
	LS	5	a.a.
5700 - 10	SH	90	blk., blky./plty., s. fis., calc., v. carb.
	LS	10	lt.gy./s. dk.gy.-brn., buff, microxln./v.f. suc., dns., (mdst.) 25-30% L.C.M. - V.P.S.
10 - 20	SH	90	a.a.
	LS	10	lt.gy.-brn., buff, microxln./s.f. xln., f. suc., w. rd. ls. grains, gran., dns., (mdst. w. tr. pkst.), NSOFC 25-30% L.C.M. - V.P.S.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

5720 - 30	SH	80	a.a.
	LS	20	gy./buff, dk.gy.-brn., microxln., s.f. suc., s.f. xln., loc. sdy., loc. pel., loc. shly., tr. p. intxln./suc. por. (5% of 20%), NSOFC (mdst./s. wkst.)
	ANHY	TR	wh., sft. 25-30% L.C.M. - V.P.S.
30 - 40	SH	60	blk., blky./plty., carb., calc.
	LS	40	buff, lt.gy.-brn., microxln., v.f. suc./chky., dns., NSOFC 25-30% L.C.M. - V.P.S.
40 - 50	SH	55	a.a.
	LS	45	brn., buff, dk.gy.-brn., microxln., suc./f. xln., s. chky., loc. pel., tr. foss. - Ivanovia ? w. calc. xls. along open face, p./tr, fr, intgran. & intxln. por. (3% of 45%), NSOFC (mdst./s. wkst.)
	DOL	TR	clr./lt.brn., f. xln., p. por., NSOFC
50 - 60	LS	50	lt.gy., lt.gy.-tan/buff, gy.-brn., microxln./s. chky., dns. (mdst.)
	SH	50	blk., blky./plty., v. carb., calc.
60 - 70	LS	60	tan, lt.brn., buff, chky./f. suc., pel., dns./g. intpar., chn. & vug. por. in 2% of 60%, NSOFC
	SH	40	a.a.
70 - 80			N.S. Lost Circ.
80 - 86			N.S. Lost Circ. @ 5786 - no returns for 5770-86
86 - 90	SH	100	blk., plty./fis., calc., carb., sl. f. mica.
	LS	TR	gy.-brn., microxln., dns.
90 - 5800	SH	100	blk., plty./fis., calc., carb., sl. f. mica.
5810 - 10	SH	20	blk., plty., s. blky., calc., carb., sl. f. mica.
20 - 30	SH	100	blk., dk.gy., plty./fis., s. blky., calc., carb., s. slty.
30 - 33	SS	45	gy./gy.-brn., v.f.g., subrnd., arg., v. lmy., anhy.
	SH	35	blk., calc., carb.
	LS	20	gy.-brn., microxln./s.f. xln., v. sdy.
33 - 36	SS	55	a.a., becm. v. anhy.
	SH	25	a.a.
	LS	20	a.a.
36 - 40	SLTST	55	dk.gy., calc., sdy.
	SH	45	blk., calc., carb., mica.
	ANHY	TR	lt.gy., amor.
40 - 45	ANHY	85	wh./crm., amor./f. suc., loc. dol., occ. stks. sh.
	SH	15	blk., calc., plty.
45 - 50	ANHY	90	wh./gy., mot., f. suc./amor., w. thin stks. sh.
	SH	10	blk., calc.
50 - 55	ANHY	90	wh./gy.-brn., mot., amor./f. suc., v. dol.
	SH	10	a.a.
55 - 60	SLTST	50	gy.-brn., calc., sdy.
	SH	25	a.a.
	ANHY	25	a.a.
60 - 66	LS	60	dk.-gr.-brn./tan, microxln., v. arg., dns.
	SH	40	blk., calc.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

TXPOC Crowley Ranch No. 1-25

CORE NO. 1 5866-5915.5
(Cut 49.5 Ft. - Recovered 49.5 Ft.)

5866 - 69 (3')	SH	brnish.-blk., calc./lmy., sl. slty., carb., hd.
69 - 70 (1')	LS	dk.gy.-brn., microxln., dol., v. arg., dns. (mdst.) NSOF
70 - 74 (4')	SH	blk./brnish./blk., calc., carb., w. occ. thin stks. DOL.
74 - 75 (1')	DOL	dk.gy.-brn., microxln., v. arg., f. mica. dns. (mdst.) NSOF
75 - 76 (1')	SH	brnish.-blk., dol.
76 - 78 (2')	DOL	dk.gy.-brn./gy.-brn., microxln. arg. dns. w. Anhy. filled frac. in bot. ft.
78 - 80.5 (2.5')	ANHY	gy., wh. dns.
80.5 - 83.5 (3')	ANHY	gy.-brn., sl. dol., sl. arg., dns.
83.5 - 87 (3.5')	SH	brnish.-blk., carb., calc. in upper part-becm. v. dol., sl. anhy. towards base
87 - 89 (2')	DOL	brnish.-blk., microxln., v. arg., w. few. vert., horz., & 20° frac. healed w. anhy., v. few. Anhy. filled vugs., spt. bleeding oil stn., faint dull brn. fluor. dd. 0 on selected fracs.
89 - 90 (1')	DOL	brnish.-blk., microxln., v. arg. (mdst.), decr. in frac., no vug. por., dns., spt. bleed stn. from few ti. frac., v. sl. dull brn. fluor.
90 - 92 (2')	DOL	dk.gy.-brn., microxln., v. arg., sl. anhy. dns. (mdst.) NOSF
92 - 94 (2')	SH	blk., cal., carb.
94 - 5902 (8')	DOL	brnish.-blk., microxln., v. arg. dns., (mdst.), incr. shlyness towards base
5902 - 5915.5 (13.5')	SH	brnish.-blk., calc., v. carb., loc. pyr., anhy.

(Base of Core)

5915 - 20	DOL	100		lt.brn., f. xln., loc. arg. to shly., ti./p.intxln. por., NOFC, poss. 0 stn.
20 - 30	DOL	85		lt.brn., mot. gy., f. xln./s. microxln., loc. anhy., fr. vug. por. in 5% of 85%, p./fr. intxln. por. in 10% of 85%, appar. 0 stn., s. dd. 0
	ANHY	15		wh., gy., suc./amor.
30 - 40	ANHY	60		wh., gy., mot., suc., loc. shly., loc. dol.
	SH	40		blk., blky., dol.
40 - 50	ANHY	60		gy./wh. mot., amor., s.v. sl. dol.
	SH	40		blk., blky., dol., s.v. carb.
50 - 5953	SALT	100		Determined by drilling break to 3 min./ft.

TOTAL DEPTH 5953 FEET

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

DEVIATION RECORD

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DEPTH	DEVIATION
500	3/4°
940	3/4°
1038	3/4°
1252	1°
1748	1°
2100	2 1/2°
2244	2 1/4°
2679	1 1/4°
2866	3/4°
3360	1 1/4°
3462	3/4°
3960	3/4°
4516	3/4°
5148	1 1/2°

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

BIT RECORD

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

BIT NO.	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS	FT/HR
1 (RR)	12 1/4	STC	F2	1038	926	27 1/4	34
2 (RR)	12 1/4	STC	F2	1875	837	24 1/2	34
3 (RR)	12 1/4	STC	F2	2100	225	9 1/2	24
4 (RR)	7 7/8	HTC	J22	2866	766	33 1/4	23
5 (RR)	7 7/8	HTC	J33	3462	596	29 1/2	20
6 (RR)	7 7/8	HTC	J33	4562	1100	69	16
7 (RR)	7 7/8	HTC	J33	5663	1101	111 3/4	10
8 (RR)	7 7/8	HTC	J33	5788	123	13 1/2	9
9	6	STC	DT	5801	15	2	8
10	6	STC	F3	5866	65	15 1/4	4
11	6	CHRIS	DIAM	5915	49	8 3/4	6
12 (RR)	6	STC	F3	5953	38	7 1/2	5

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL CHRONOLOGY

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DATE 1984	MIDNIGHT DEPTH	FT/ DAY	DAILY OPERATIONS
3-29	722	722	Rigged up - Drl. rat & mouse hole - Spud @ depth 112' @ 9:30 A.M. - Drl. -
3-30	1093	371	Drl. - Sur. - P.O.O.H. for Bit No. 2 - Twisted off - Fishing - Rec. fish -
3-31	1622	529	Drl. -
4-01	1875	253	Drl. - Ser. rig - Drl. - Mixed mud - Worked drl. pipe - Trip for plugged bit -
4-02	2100	225	Lost circ. - Drl. w. no returns - Short trip to D.C. - Pumped mud down hole - P.O.O.H. - Rig up to run 9 5/8" csg. -
4-03	2110	10	Set 9 5/8" @ 2100' - W.O.C. - Test pipe rams to 1500# - T.I.H. with Bit #4 -
4-04	2627	517	Drl. - Sur. - Ser. rig - Drl. -
4-05	2866	239	Drl. - Lost returns @ 2654' - Mix mud & L.C.M. - Spot pill - Drl. - P.O.O.H. for Bit #5 -
4-06	3308	442	T.I.H. - Drl. -
4-07	3616	308	Drl. - Survey - Drl. - Trip for Bit #6 - Drl. - Trip to replace jet lost from Bit #6 - Drl. -
4-08	4011	395	Drl. - Ser. rig - Drl. - Circ. up samp. -
4-09	4419	408	Drl. - Survey - Serv. rig - Drl. -
4-10	4629	210	Drl. - Serv. rig - Drl. - Trip for Bit #7 - Drl. -

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL CHRONOLOGY (cont'd)

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DATE 1984	MIDNIGHT DEPTH	FT/ DAY	DAILY OPERATIONS
4-11	4901	272	Dr. - Circ. up samp. - Drl. - Ser. rig. - Lost circ. @ 4855' - 5 std. short trip - Recovering partial returns - T.I.H. - Drl. -
4-12	5148	247	Drl. - Work pipe - Circ. -
4-13	5148	-	Losing mud - Circ. & mixing mud - Short trip - Wash to bot. - Circ. & mix mud - P.O.O.H. for test tools - S.L.M. -
4-14	5224	76	T.I.H. w. test tools - DST #1 5130-48 - P.O.O.H. - Lay down test tools & pick up bit - T.I.H. - Drl. -
4-15	5415	191	Drl. -
4-16	5597	182	Drl. - Lost returns - Mix mud & build volume -
4-17	5604	7	Mix mud - Pull 10 stds. - Mix mud - Attempt circ., no returns - Condition mud - Spot L.C.M. pill 25' off bot. - Pull 20 stds. - W.O.M. - Circ. - Drl. w. reduced pump press. -
4-18	5663	59	Drl. w. reduced pump press. - Lost circ. - Mix mud & L.C.M. - Spot pill - Circ. - Trip for Bit #8 - Circ. - Mix mud -
4-19	5786	123	Mix mud - Pull 10 stds. off bot. - Run to bot. - Circ. 5' off bot. - Drl. - Drl. w. reduced pump press. & stks. per min. - Losing mud - Lost circ. @ 5786 - Pulled 10 stds. - Mix mud & L.C.M. - Spot pill - Pull 10 stds. - Mix mud & L.C.M. -

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL CHRONOLOGY (cont'd)

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DATE 1984	MIDNIGHT DEPTH	FT/ DAY	DAILY OPERATIONS
4-20	5786	-	Build mud vol. - Mix gel., L.C.M., & Bar. - Circ. - T.I.H. to bot. - Circ. & condition mud - Trip to check bit gage - Circ. - Surv. - P.O.O.H. for DST #2 (5698-5786) -
4-21	5786	-	P.O.O.H. - S.L.M. - Pick up test tool - T.I.H. - 25' fill - P.O.O.H. - Lay down tool - Pick up bit - Washed to bot. - Circ. & cond. mud - P.O.O.H. -
4-22	5786	-	P.O.O.H. - Pick up test tool for DST #3 (5698-5786) - T.I.H. - Testing -
4-23	5786	-	Circ. - Mix bar, gel, and chem. - Shake out L.C.M. - Losing returns - Mix pill - Run in 10 stds. & spot pill - Build vol. - Mix gel & bar - Circ. - P.O.O.H. -
4-24	5786	-	P.O.O.H. - Lay down B.H.A. & D.C. - Pick up packer tool and jars - Circ. & hook up Dowell for polymer squeeze - T.I.H. open ended w. packer tool - Set packers at base of 9 5/8" csg. - Squeeze - P.O.O.H. - Pick up B.H.A. & D.C. - T.I.H. to 3100' - Circ. & cond. mud - Run in 3 stds. & circ. -
4-25	5786	-	Circ. & cond. mud - Run in 2 stds. & circ. - Losing mud @ 4548' - Lost circ. - Pull into 9 5/8" csg. & circ. - P.O.O.H. - Pick up packer tool & jars - T.I.H. 22 stds. - Build mud vol. - W.O. Howco -

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL CHRONOLOGY (cont'd)

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DATE 1984	MIDNIGHT DEPTH	FT/ DAY	DAILY OPERATIONS
4-26	5786	-	W.O. Howco - Rig up Howco - press test lines - Attempt to pump Ca Cl_2 + Flo-check + Cmt. into fm. - Pressured up w. no injection - Pulled packer - P.O.O.H. - Lay down packer - Pick up B.H.A. & D.C. - Drl. cmt. & washing to bot. - Drl. & wash 1 joint, then circ. hole clean - Losing mud @ 4609' - Circ. & mix mud -
4-27	5786	-	Drl. cmt. & washing through polymer to bot. 1 joint then circ. hole clean - Wash to bot. - Build mud vol. - Circ. out polymer contaminated mud - Jetted pits - Mix mud -
4-28	5786	-	Circ., building vol. & mud wt. - Lost circ. @ 9.2 lbs. - Pulled 40 stds. - Filled hole - Checked injection rate - P.O.O.H. - Lay down B.H.A. & D.C. - Pick up packer tool & jars - T.I.H. - Set packer at base 9 5/8" csg. - Squeezed 2000 gal. Ca Cl_2, 10 bbls. H_2O, 2000 gal. Flo-check, 10 bbls. H_2O, 2000 gal. Ca Cl_2, 10 bbls. H_2O, 2000 gal. Flo-check, 10 bbls H_2O & 84 bbls cmt. - Pulled packer - Hole went on vacuum - Reset packers - Filled annulus w. mud W.O.C. -
4-29	5786	-	Pulled packer - P.O.O.H. - Lay down packer tool & pick up B.H.A. & D.C. - Circ., mix gel & chem. - T.I.H. - Tag cmt. @ 3650' - Drl. out green cmt. to 3800' & firm cmt. @ 3957' - Drl. & washed to 4328' circ. hole clean after each joint drl. -

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL CHRONOLOGY (cont'd)

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DATE 1984	MIDNIGHT DEPTH	FT/ DAY	DAILY OPERATIONS
4-30	5786	-	Drl. cmt. & circ. 4328' to 4608' - Slug of polymer contaminated mud - Jetted pits - Mix mud & build vol. - Drl. & circ. 1 joint intervals to 4699' - Lost circ. - Pulled 40 stds - Circ. @ 2050' cond. mud - Circ. @ 2960' -
5-01	5786	-	Circ. @ 2960' - Run in 10 stds to 3926' & circ. - Circ. @ 4699' - Drl. cmt. & circ. at 1 joint intervals to 4916' - Drl., wash, & circ. 3 std. intervals to 5786' - Mix mud vol. & wt. -
5-02	5786	-	Mix mud vol. & wt. - Circ. - Lost circ. w. mud wt. @ 9.4 lbs. - P.O.O.H. - Reduce mud wt. - Circ. - W.O. Howco - Rig up Howco for cmt. squeeze - Test pipe rams & blind rams to 2000 psi - Pick up jars - T.I.H. open ended - Squeeze w. 2000 gals. $Ca\ Cl_2$, 5 bbls H_2O, 2000 gals. Flo-check, 5 bbls. H_2O, 2000 gals. $Ca\ Cl_2$, 5 bbls H_2O, 2000 gals. Flo-check, 5 bbls. H_2O, 660 sx. thick set cmt. @ 14.0 ppg. -
5-03	5786	-	Complete squeeze - Opened pipe rams - Lost mud - Pulled 20 stds. - Filled hole (3 bbls. mud) - W.O.C. - P.O.O.H. - Lay down jars & pick up B.H.A. & D.C. - Circ. above shoe - T.I.H. to tag cmt. - Cmt. @ 3675' - Circ. - Wash 2 stds. & circ. -
5-04	5786	-	Drl. cmt. 4174-4949 -
5-05	5786	-	Drl. cmt. 4949-5227 - Circ. & condition mud - Press. test hole for stability - Mud wt. @ 10.7# - Press. to 11# & lost circ. -

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL CHRONOLOGY (cont'd)

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DATE 1984	MIDNIGHT DEPTH	FT/ DAY	DAILY OPERATIONS
5-06	5786	-	Attempt to circ. - Cond. mud - P.O.O.H. - Rig up for logging -
5-07	5786	-	Logging - Rig down loggers -
5-08	5786	-	T.I.H. w. near-bit reamer & set of jars - Circ. & build mud vol. - Wash & ream to bot. - P.O.O.H. - Lay down 8 joints - Wash & ream to 5089 -
5-09	5786	-	Ream & wash to 5785 - Circ. - P.O.O.H. to csg. - Circ. & cond. mud - P.O.O.H. - Lay down D.C. - Changed rams - Rig up csg. crew -
5-10	5786	-	Rig up csg. crew - Run 7" csg. to 5777' - Cmt. - W.O.C. - Set slips & cut pipe - Nipple up - W.O.C. -
5-11	5786	-	W.O.C. - Change flow line - Press. test B.O.P. - Repair leaks - Lay down 4" D.P. - Pick up 21 4 3/4" D.C. & 3 1/2" D.P. -
5-12	5800	14	Pick up 3 1/2" D.P. - Drl. float, cmt., shoe - Drl. 14' new hole - Mix gel & wt. up - Circ. & wt. up to 10.5# - P.O.O.H. for bit -
5-13	5926	60	Circ. & drop ball - Core - Circ. - Core - Circ. for bot. samp. - P.O.O.H. - Lay down core & barrel - T.I.H. w. Bit #12 - W.O.O. - Drl. -
5-14	5926	60	Circ. & drop ball - Core - Circ. - Core - Circ. for bot. samp. - P.O.O.H. - Lay down core & barrel - T.I.H. w. Bit #12 - W.O.O. - Drl.

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Clarence L. Harr
Consulting Petroleum Geologist

WELL CHRONOLOGY (cont'd)

TRANSCO EXPLORATION PARTNERS
OPERATING COMPANY
Crowley Ranch No. 1-25
NW NW NW 25-T34S-R25E
San Juan County, Utah

DATE 1984	MIDNIGHT DEPTH	FT/ DAY	DAILY OPERATIONS
5-15	5953	27	Drl. - Circ. for logs - Circ. & cond. mud - P.O.O.H. - Rig up loggers - W.O.L. - Logging -
5-16	5953	-	Completed logging - P.O.O.H. - Layed down D.C. - T.I.H. - Prep. to Plug & Abandon

Clarence L. Harr
Consulting Petroleum Geologist
May 21, 1984

2024 Broadview Ct. Grand Junction, Colo. 81503 303-241-5974

Form OGC-3

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

56 64 01

4

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

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 ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other P&A

2. NAME OF OPERATOR: TXP OPERATING COMPANY ATTN: KAY MORGAN

3. ADDRESS OF OPERATOR: P. O. BOX 1396, HOUSTON, TEXAS 77210

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

At surface: 660' FWL & 660' FNL OF SEC. 25 (NW¼NW¼)

At top prod. interval reported below: --

At total depth: SAME AS SURFACE

5. LEASE DESIGNATION AND SERIAL NO.: FEE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: --

7. UNIT AGREEMENT NAME: --

8. FARM OR LEASE NAME: TXPOC CROWLEY RANCH

9. WELL NO.: 1-25

10. FIELD AND POOL, OR WILDCAT: WILDCAT

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: SEC. 25, T34S, R25E

12. COUNTY OR PARISH: SAN JUAN

13. STATE: UTAH

14. PERMIT NO.: 43-037-30978 DATE ISSUED: 01-16-84

15. DATE SPUDDED: 03-29-84 16. DATE T.D. REACHED: 05-16-84 17. DATE COMPL. (*Ready to prod.*): 05-21-84 (P&A) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: GL 6893', KB 6906' 19. ELEV. CASINGHEAD:

20. TOTAL DEPTH, MD & TVD: 5953' 21. PLUG, BACK T.D., MD & TVD: Surface 0' 22. IF MULTIPLE COMPL., HOW MANY*: - 23. INTERVALS DRILLED BY: → ROTARY TOOLS: 0-5953 CABLE TOOLS: Rotary

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: N/A

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: CNL-CDL, BHC SON, DI-LL, MEL, DLL-MSFL, FEDM, DST (SEE ATTACHED TRANSMITTAL) SENT DIRECTLY BY GEARHART

Sample

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
14"	Conductor	101'	-	-	19'
9-5/8"	36# K-55 LTC	2100'	12-1/4"	w/900 sx	19'
7"	P110 FL 48	5777'	7-7/8"	w/75 sx	3216'

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*)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5827-5710'	20 sx cmt.
3236-3136'	27 sx cmt.
2150-2050'	35 sx cmt.
Surface	10 sx cmt.

RECEIVED
JUN 22 1984
DIVISION OF OIL, GAS & MINING

33.* PRODUCTION

DATE FIRST PRODUCTION: | PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*): | WELL STATUS (*Producing or shut-in*): P&A

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

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.*): 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 Superintendent DATE: 06-18-84

*(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.
			SEE ATTACHED

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Morrison	268	
Summerville	1040	
Entrada	1118	
Carmel	1282	
Navajo	1307	
Kayenta	1480	
Wingate	1742	
Chinle	2039	
Shinarump	2615	
Moenkopi	2717	
Cutler	2794	
Honaker Trail	4408	
Paradox	5007	
Sitton or Hatch	5417	
Boundary Butte Sh	5560	
Upper Ismay	5576	
Havenweep Sh.	5645	
Lower Ismay	5710	
Gothic Sh.	5769	
Upper Desert Cr.	5830	
Lower Deser Cr.ay	5886	
Chimney Rock Shale	5906	
Akah Carbonate	5916	
Akah Salt	5949	

TXPOC CROWLEY RANCH #1-25
SEC. 25, T34S, R25E
SAN JUAN, UTAH

DST #1: 5130-5148, Pennsylvanian Paradox Op 15, SI 30, Op 60, SI 120. IF Op w/good blow, (12" from btm. bucket) on 1/8" BH chk (7 oz in 2 min) decr. to weak blow (1 oz) 6" in 15 min. FF Op w/weak blow (5" in bucket = 0 oz) decreasing to dead (no blow = 0 oz) in 60 min. NGTS. Rec 10' (07 bbl) mud with rainbow of oil; Splr: 0.62 CFG @ 80 psig, 2300 cc GC & sli OCM., no gas, no wtr., Rm splr - 470 ohmm @ 70°F. IHP 2442, IFP 37.9 = 36.1, ISIP: 102, FFP 39 = 39 , FSIP 128, FHP 2441, BHT 118°F.

DST #2: 5698-5786, Pennsylvanian Lower Ismay = Misrun due to 25' of fill on bottom.

DST #3: 5698-5786, Pennsylvanian Lower Ismay, Op 30, SI 60, Op 37, SI 65. IF op with a weak blow (1½") in bubble bucket on 3/4" BH chk., decreasing to ½" blow in 20 minutes, remaining ½" blow to end 30" IF. FF op with no surface bubble. Remained dead to end 37" FF. Rec 90' (.44 bbls) SG&OCM. Splr: 0.01 CF6 @ 33 psig, 2450 cc Sli. O GCM, no wtr., Rmf (splr.) = 2.82 @ 65°F. ISHP 2819, IFP 124-149, ISIP 185, FFP 126 = 131, FSIP 142, FHP 2839, BHT 130°F.

CORE #1: 5866-5915.5, Pennsylvanian Upper Desert Creek Shale to Chimney Rock Shale. Cut and recovered 49.5'. 5866-78 = 12' Upper Desert Creek Shale 5878-5883.5 = 5.5' Lower Desert Creek Anhydrite 5883.5 - 5887 = 3.5' Lower Desert Creek Shale. 5887-5892 - 5' Lower Desert Creek dolomite, non-porous, with spotted bleeding oil stain and faint dull brown flour, and dead oil on selected fractures in upper 3'. No odor. 5892-5894 = 2' Lower Desert Creek Shale, 5894-5902 = 8' Lower Desert Creek Shaly dolomite. 5902-5915.5 = 13.5' Chimney Rock Shale.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS REPORT

FOR

TRANSCO EXPLORATION COMPANY

1-25 CROWLY CREEK
WILDCAT
SAN JUAN COUNTY, UTAH

RECEIVED
JUL 5 1984
DIVISION OF OIL
GAS & MINING

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

TRANSCO EXPLORATION COMPANY
1-25 CROWLY CREEK
WILDCAT
SAN JUAN COUNTY, UTAH

DATE ON : 15-MAY-84 OFF: 27-JUN-84
FORMATION : DESERT CREEK
DRLG. FLUID: WATER BASE MUD
LOCATION : NW NW SEC 25-T34S-R25E

FILE NO : 3803-3327
LABORATORY: AURORA
ANALYSTS : DS:EV
ELEVATION : 6906' KB

FULL DIAMETER ANALYSIS--BOYLE'S LAW POROSITY

SAMPLE NUMBER	DEPTH FEET	PERM MD MAX Ka	PERM MD 90DEG Ka	He POR	OIL% PORE	WTR% PORE	GRAIN DEN	DESCRIPTION
	5866.0-78.0							DOLO/SHALE - NO ANALYSIS
	5878.0-85.0							ANHYDRITE - NO ANALYSIS
1	5885.0-86.0	0.02	0.01	2.5	0.0	66.3	2.80	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
2	5886.0-87.0	0.01	**	3.8	0.0	72.8	2.77	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
3	5887.0-88.0	<0.01	**	4.4	0.0	69.8	2.82	DOLO BRN V/FN-XLN SL/SLTY SL/CALC PYR
4	5888.0-89.0	<0.01	**	1.2	0.0	67.2	2.74	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
5	5889.0-90.0	0.04	0.01	2.9	0.0	71.3	2.75	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
6	5890.0-91.0	0.05	0.01	4.0	0.0	85.8	2.76	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
7	5891.0-92.0	0.02	0.02	4.3	0.0	86.6	2.76	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
8	5892.0-93.0	0.04	**	5.2	0.0	86.6	2.70	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
9	5893.0-94.0	0.07	0.03	4.3	0.0	90.0	2.73	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
10	5894.0-95.0	0.02	0.01	3.2	0.0	88.4	2.72	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
11	5895.0-96.0	<0.01	<0.01	3.9	0.0	83.0	2.72	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
12	5896.0-97.0	0.02	0.01	5.8	0.0	86.8	2.73	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
13	5897.0-98.0	0.11	0.03	5.6	0.0	66.3	2.74	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
14	5898.0-99.0	0.01	0.01	5.8	0.0	88.8	2.73	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
15	5899.0- 0.0	0.04	0.02	5.0	0.0	83.1	2.72	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
16	5900.0- 1.0	0.09	0.04	4.6	0.0	86.1	2.74	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
17	5901.0- 2.0	0.02	0.01	3.5	0.0	74.2	2.75	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
18	5902.0- 3.0	0.01	0.01	4.8	0.0	67.0	2.76	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
19	5903.0- 4.0	<0.01	**	3.6	0.0	57.5	2.73	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
20	5904.0- 5.0	<0.01	**	4.5	3.8	90.6	2.73	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
21	5905.0- 6.0	<0.01	**	3.2	5.6	89.2	2.72	DOLO BRN V/FN-XLN SL/SLTY SL/CALC
	5906.0-15.0							SHALE - NO ANALYSIS

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

TRANSCO EXPLORATION COMPANY
1-25 CROWLY CREEK

DATE : 15-MAY-84
FORMATION : DESERT CREEK

FILE NO. : 3803-3327
ANALYSTS : DS:EV

*** CORE SUMMARY AVERAGES FOR 1 ZONE ***

DEPTH INTERVAL: 5885.0 TO 5906.0

FEET OF CORE ANALYZED : 21.0 FEET OF CORE INCLUDED IN AVERAGES: 21.0

-- SAMPLES FALLING WITHIN THE FOLLOWING RANGES WERE AVERAGED --

PERMEABILITY HORZONTAL RANGE (MD.)	:	0.00 TO	1.0	(UNCORRECTED FOR SLIPPAGE)
HELIUM POROSITY RANGE (%)	:	1.0 TO	100.0	
OIL SATURATION RANGE (%)	:	0.0 TO	6.0	
WATER SATURATION RANGE (%)	:	50.0 TO	95.0	

SHALE SAMPLES EXCLUDED FROM AVERAGES.

AVERAGES FOR DEPTH INTERVAL: 5885.0 TO 5906.0

AVERAGE PERMEABILITY (MILLIDARCIES)

ARITHMETIC PERMEABILITY	:	0.03
GEOMETRIC PERMEABILITY	:	0.02
HARMONIC PERMEABILITY	:	0.02

AVERAGE POROSITY (PERCENT) : 4.1

AVERAGE RESIDUAL OILSATURATION : 0.4
(PERCENT OF PORE SPACE)

PRODUCTIVE CAPACITY (MILLIDARCY-FEET)

ARITHMETIC CAPACITY	:	0.62
GEOMETRIC CAPACITY	:	0.43
HARMONIC CAPACITY	:	0.33

AVERAGE TOTAL WATER SATURATION : 79.9
(PERCENT OF PORE SPACE)

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

PERMEABILITY VS POROSITY

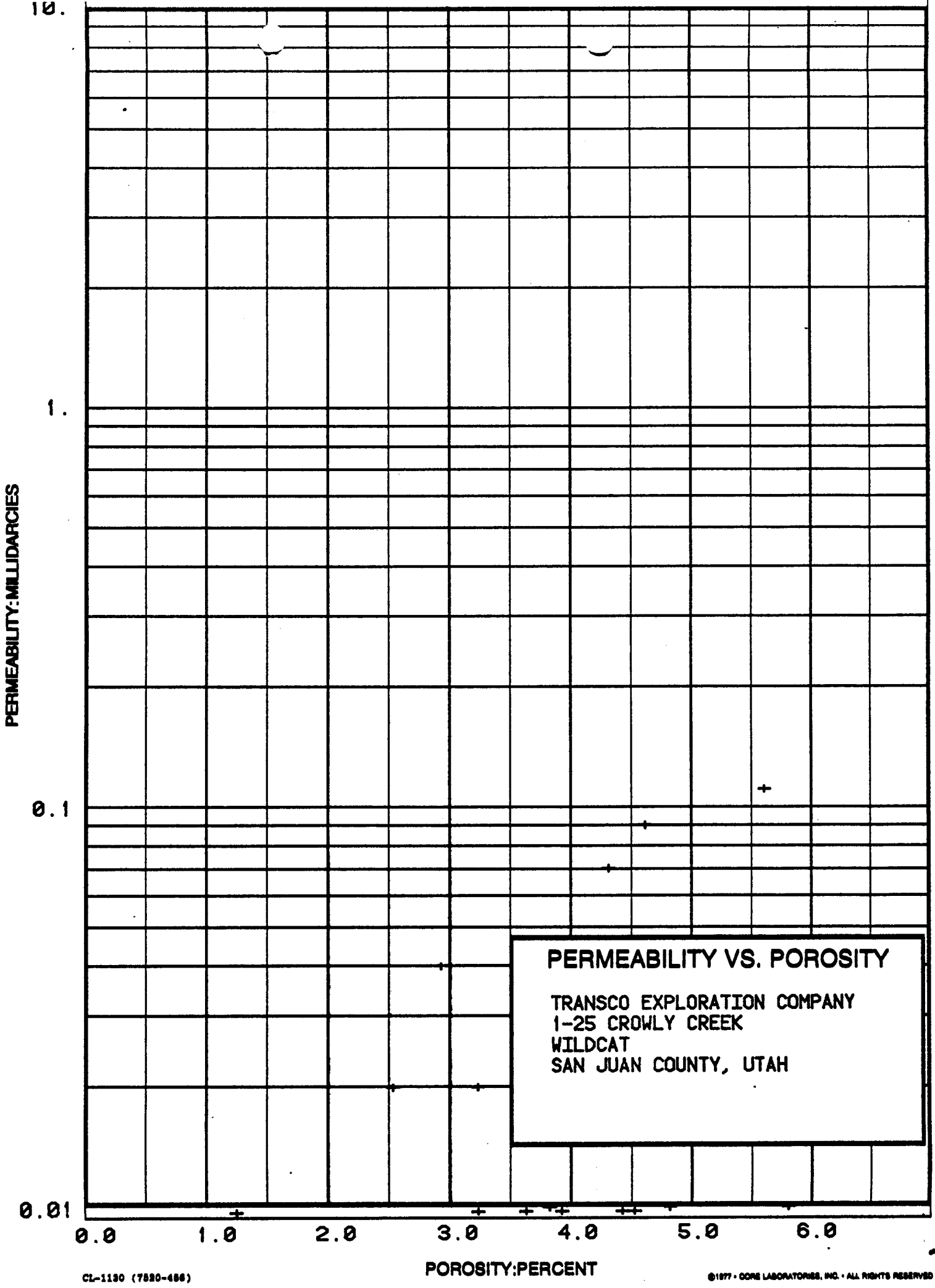
COMPANY: TRANSCO EXPLORATION COMPANY
FIELD : WILDCAT

WELL : 1-25 CROWLY CREEK
COUNTY, STATE: SAN JUAN COUNTY, UTAH

AIR PERMEABILITY : MD - HORIZONTAL (UNCORRECTED FOR SLIPPAGE)
POROSITY : PERCENT (HELIUM)

DEPTH INTERVAL	RANGE & SYMBOL	PERMEABILITY MINIMUM	PERMEABILITY MAXIMUM	POROSITY MIN.	POROSITY MAX.	POROSITY AVERAGE	PERMEABILITY AVERAGES ARITHMETIC	HARMONIC	GEOMETRIC
5885.0 - 5906.0	1 (+)	0.000	1.0	1.0	10.0	4.1	0.03	0.02	0.02

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



CL-1130 (7520-456)

©1977 • CORE LABORATORIES, INC. • ALL RIGHTS RESERVED

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TRANSCO EXPLORATION COMPANY
FIELD : WILDCAT

WELL : 1-25 CROWLY CREEK
COUNTY, STATE: SAN JUAN COUNTY, UTAH

AIR PERMEABILITY : MD. (HORIZONTAL) RANGE USED 0.000 TO 1.
POROSITY : PERCENT (HELIUM) RANGE USED 1.0 TO 46.0

(PERMEABILITY UNCORRECTED FOR SLIPPAGE)

DEPTH LIMITS : 5885.0 - 5906.0 INTERVAL LENGTH : 21.0
FEET ANALYZED IN ZONE : 21.0 LITHOLOGY EXCLUDED : NONE

DATA SUMMARY

POROSITY AVERAGE	PERMEABILITY AVERAGES ARITHMETIC	HARMONIC	GEOMETRIC
4.1	0.03	0.02	0.02

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TRANSCO EXPLORATION COMPANY
FIELD : WILDCAT

WELL : 1-25 CROWLY CREEK
COUNTY, STATE: SAN JUAN COUNTY, UTAH

GROUPING BY POROSITY RANGES

POROSITY RANGE	FEET IN RANGE	AVERAGE POROSITY	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
0.0 - 2.0	1.0	1.2	0.009	0.009	4.8	4.8
2.0 - 4.0	8.0	3.3	0.015	0.017	38.1	42.9
4.0 - 6.0	12.0	4.9	0.027	0.040	57.1	100.0

TOTAL NUMBER OF FEET = 21.0

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TRANSCO EXPLORATION COMPANY
FIELD : WILDCAT
WELL : 1-25 CROWLY CREEK
COUNTY, STATE: SAN JUAN COUNTY, UTAH

GROUPING BY PERMEABILITY RANGES

PERMEABILITY RANGE	FEET IN RANGE	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	AVERAGE POROSITY	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
0.005 - 0.010	6.0	0.009	0.009	3.5	28.6	28.6
0.010 - 0.020	3.0	0.010	0.010	4.8	14.3	42.9
0.020 - 0.039	5.0	0.020	0.020	3.9	23.8	66.7
0.039 - 0.078	5.0	0.047	0.048	4.3	23.8	90.5
0.078 - 0.156	2.0	0.099	0.100	5.1	9.5	100.0

TOTAL NUMBER OF FEET = 21.0

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TRANSCO EXPLORATION COMPANY
FIELD : WILDCAT

WELL : 1-25 CROWLY CREEK
COUNTY, STATE: SAN JUAN COUNTY, UTAH

POROSITY-FEET OF STORAGE CAPACITY LOST FOR SELECTED POROSITY CUT OFF

POROSITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	ARITH MEAN	MEDIAN
0.0	0.0	0.0	21.0	100.0	4.1	4.3
2.0	1.0	1.4	20.0	98.6	4.2	4.3
4.0	9.0	32.3	12.0	67.7	4.9	
6.0	21.0	100.0	0.0	0.0		

TOTAL STORAGE CAPACITY IN POROSITY-FEET = 86.1

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

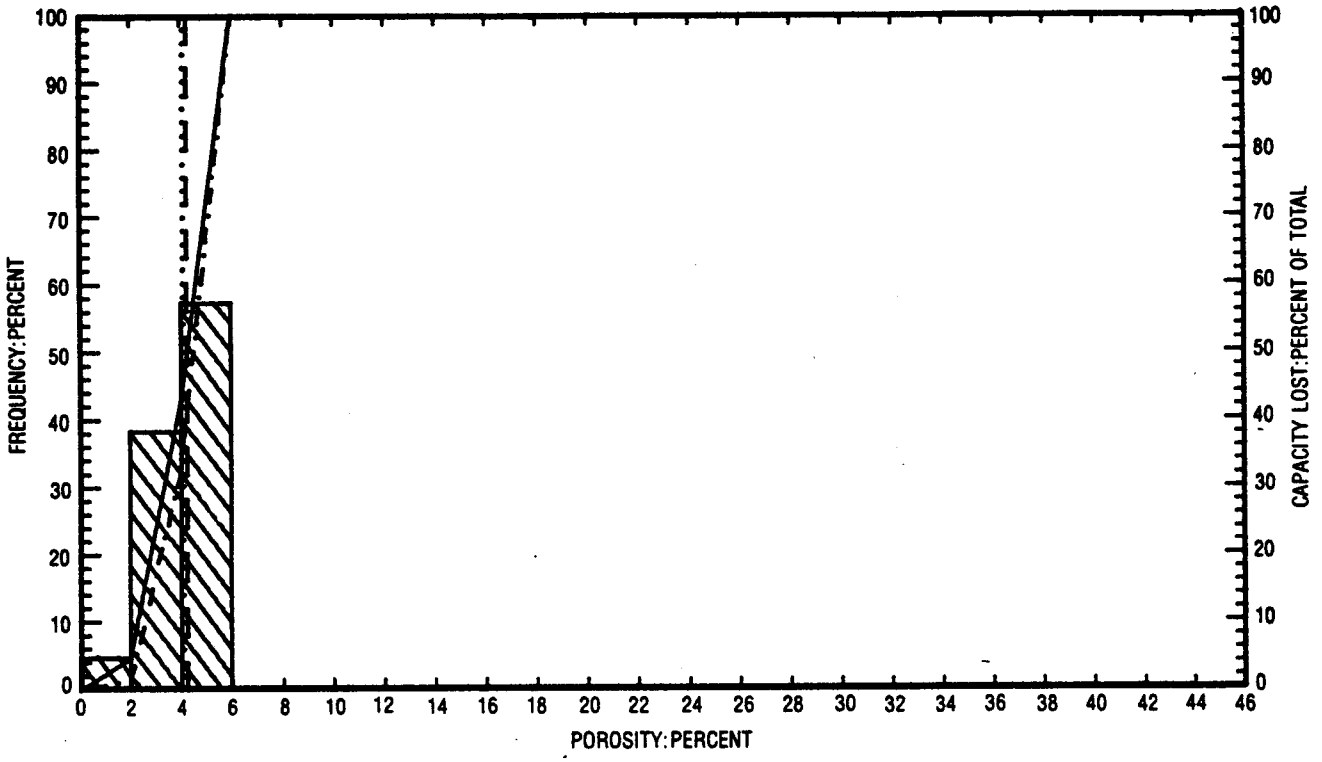
COMPANY: TRANSCO EXPLORATION COMPANY
FIELD : WILDCAT
WELL : 1-25 CROWLY CREEK
COUNTY, STATE: SAN JUAN COUNTY, UTAH

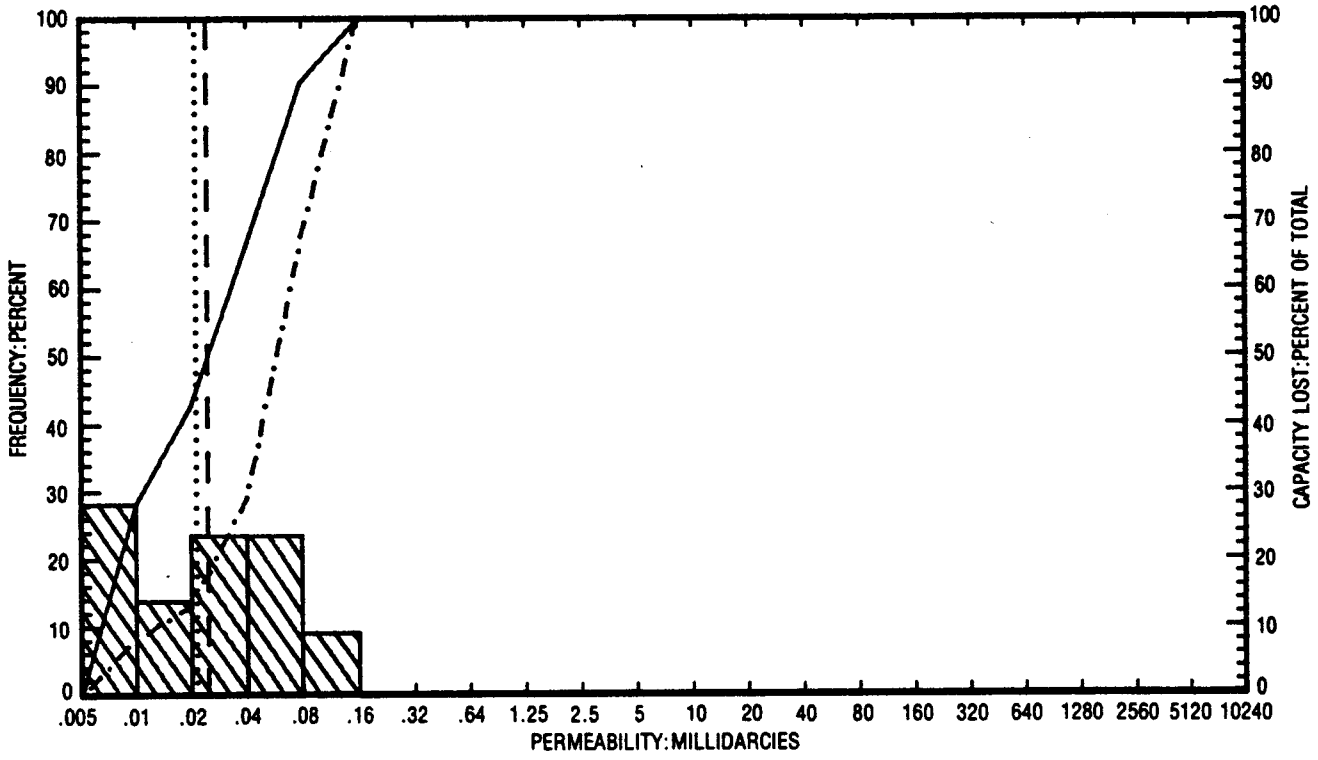
MILLIDARCY-FEET OF FLOW CAPACITY LOST FOR SELECTED PERMEABILITY CUT OFF

PERMEABILITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	GEOM MEAN	MEDIAN
0.005	0.0	0.0	21.0	100.0	0.02	0.02
0.010	6.0	8.7	15.0	91.3	0.03	0.04
0.020	9.0	13.5	12.0	86.5	0.04	0.04
0.039	14.0	29.5	7.0	70.5	0.06	
0.078	19.0	67.9	2.0	32.1	0.10	
0.	21.0	100.0	0.0	0.0		

TOTAL FLOW CAPACITY IN MILLIDARCY-FEET(ARITHMETIC) = 0.62

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.





PERMEABILITY AND POROSITY HISTOGRAMS

TRANSCO EXPLORATION COMPANY
1-25 CROWLY CREEK
WILDCAT
SAN JUAN COUNTY, UTAH

LEGEND

ARITHMETIC MEAN POROSITY
GEOMETRIC MEAN PERMEABILITY
MEDIAN VALUE
CUMULATIVE FREQUENCY
CUMULATIVE CAPACITY LOST

©1977 • CORE LABORATORIES, INC. • ALL RIGHTS RESERVED • 1039/7/77/500

CL-1082 (7520-442)

©1972 - CORE LABORATORIES, INC.

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY TRANSCO EXPLORATION COMPANY FILE NO. 3803-3927
WELL 1-25 CROWLY CREEK DATE 15-MAY-84 ENGRS. DS:EV
FIELD WILDCAT FORMATION DESERT CREEK ELEV. 6906' KB
COUNTY SAN JUAN STATE UTAH DRLG. FLD. WATER BASE MUD CORES

CoRes Log

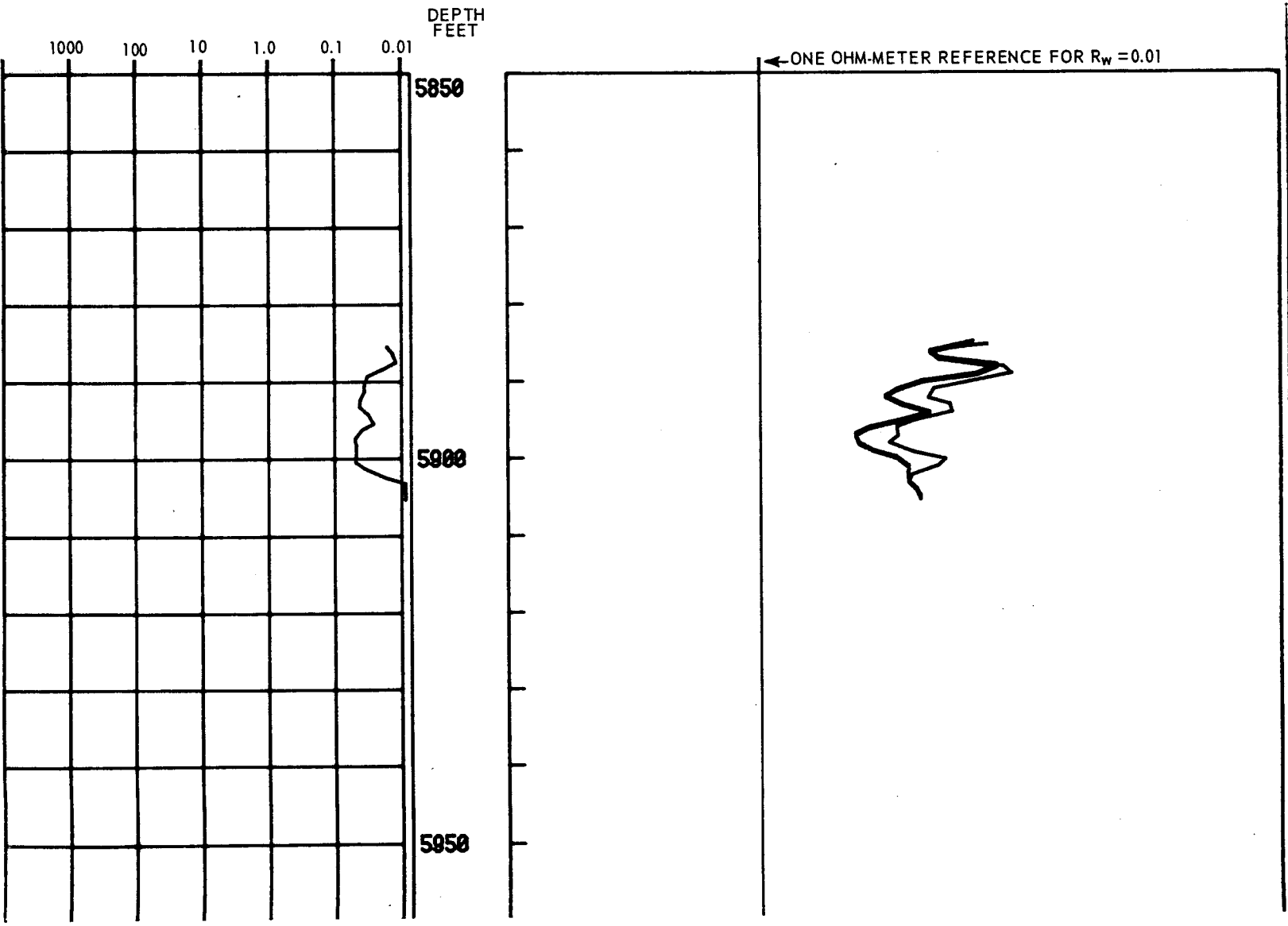
CORE and RESISTIVITY EVALUATION

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted) but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

RESISTIVITY PARAMETERS: a = 1.00 m = 2.00 n = 2.00 . Depths 5885.0 to 5906.0 .
a = m = n = . Depths to .

PERMEABILITY
MILLIDARCIES

CORE ANALYSIS CALCULATED RESISTIVITY
R_o = OHM-METERS AT 100% S_w
R_{mp} = OHM-METERS AT CRITICAL S_w



CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

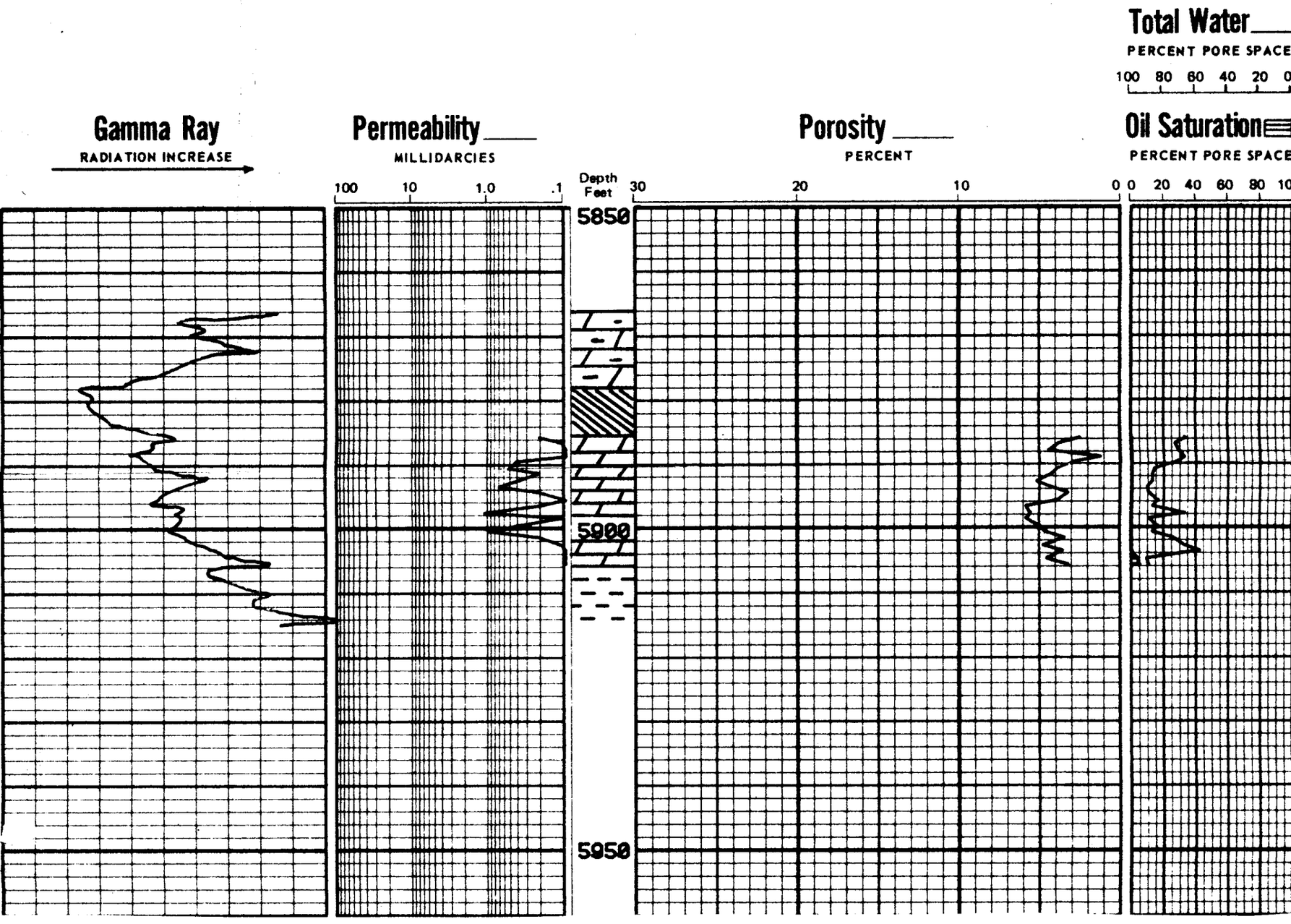
COMPANY TRANSCO EXPLORATION COMPANY — FILE NO. 3803-3327
WELL 1-25 CROWLY CREEK — DATE 15-MAY-84
FIELD WILDCAT — FORMATION DESERT CREEK — ELEV. 6906' KB
COUNTY SAN JUAN — STATE UTAH — DRLG. FLD. WATER BASE MUD — CORES
LOCATION NW NW SEC 25-T34S-R25E

RECEIVED
DIVISION OF OIL
GAS & MINING

CORRELATION COREGRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc., (all errors or omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'



7501 STEMMONS FREEW/ X 47547, DALLAS, TEXAS 75247 • 214/631-8270

CORE LABORATORIES, INC.

Reply To:
10703 E. BETHANY DRIVE
AURORA, COLORADO 80014

July 11, 1984

Tranaco Exploration Company
One United Bank Center
1700 Lincoln
Suite 2100
Denver, Colorado 80203
Attention: Mr. Bruce Wiley

RECEIVED
JUL 13 1984
DIVISION OF OIL
GAS & MINING

Dear Mr. Wiley:

Recently we mailed to you and your partners the final reports on the No. 1-25 Crowly Creek Well of San Juan County, Utah. It has come to our attention that the Correlation Coregraph copies were not attached. Please revise your copies of the report with the enclosed graphs.

Thank you for your patience in this matter. We regret any inconvenience this might have caused you and your partners.

Sincerely,
CORE LABORATORIES, INC.

Christy A. Rubano

Christy A. Rubano
Administrative Assistant

/cr
Encls.

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 13, 1985

TXP Operating Company
P O Box 1396
Houston, Texas 77210

Gentlemen:

Re: Well No. TXPOC Crowley Ranch 1-25 - Sec. 25, T. 34S., R. 25E
San Juan County, Utah - API #43-037-30978

According to our records a "Well Completion Report" filed with this office June 18, 1984 on the above referred to well indicates the following electric logs were run: CNL-CDL, BHC Sonic, DILL, MEL, DLL-MSFL, FEDM, and DST. The attached transmittal indicated that our office was to receive copies directly from Gearhart, however; this office has not yet received these logs.

Please take care of this matter as soon as possible, but not later than April 13, 1985.

Your cooperation in this matter is appreciated.

Sincerely,

Pam Kenna

Pam Kenna
Well Records Specialist

CLJ/clj
CC: Dianne R. Nielson
Ronald J. Firth
John R. Baza
File
0123S/8

TXP Operating Company
A Limited Partnership
Transco Exploration Company, Managing General Partner

One United Bank Center
1700 Lincoln, Suite 2100
Denver, Colorado 80203
303-863-3600

RECEIVED
JUN 1 0 1985
DIVISION OF OIL
GAS & MINING

June 6, 1985

State of Utah Natural Resources
355 W. North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Re: March 13, 1985 request for logs & DST on TXPOC, **1-25 Crowley Ranch well, sec 25-T38S-R25E,** San Juan Co., Utah

Dear Pam Kenna:

Enclosed please find copies of DST report #1-3 on the subject well. It is my understanding that you have received the open hole logs directly from Gearhart subsequent to your March 13, 1985 request. This should complete your file on this well. Please contact me should this matter require any further attention.

Sincerely,

Bruce H. Wiley

Bruce H. Wiley
Senior Exploration Geologist
TXP Operating Company