

# Kenny Lake Ventures, LLC

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Gary F. Player Cell: (435) 590 8705

[dirtdoctor43@gmail.com](mailto:dirtdoctor43@gmail.com)

Mr. Brent Hunter, Chairman  
Central Iron County Water Conservancy District  
88 E. Fiddler's Canyon Drive  
Cedar City, Utah 84721

Subject: Reentry of the ARCo Three Peaks No. 1 Wildcat Well

Dear Brent:

ARCo drilled the Three Peaks well at the east end of Iron Springs Gap in the SW quarter of the SW quarter of Section 17, T. 35 S., R. 12 W. in 1984 and 1985. The well reached a total depth of 15,590 feet without detecting any showings of oil and gas. However, the well did penetrate a potential ground water aquifer—the “fractured quartz monzonite,” from 2,322 feet below ground level (BGL) to 6,286 feet BGL.

My review of the “sonic” log run in open hole (before casing was set) disclosed a very porous interval at the depths proposed for perforating. The porous zone is most likely to be a highly fractured portion of the quartz monzonite aquifer.

The well was plugged and abandoned by ARCo on March 15, 1985. Several cement plugs were placed in the 9 and 5/8" casing below 11,590 feet BGL, from 7,050 feet to 6,920 feet BGL, and from 2,350 feet to 2,225 feet BGL. One last plug was set from the surface to 25 feet BGL.

Most important, the 9 and 5/8" casing is open for potential future aquifer testing below 2,350 feet BGL. In order to test the quartz monzonite (Qm) aquifer, a workover rig similar to one available from Grimshaw Drilling in Enoch, would set up over the hole and drill out the surface plug and the next shallow plug present from approximately 2,225 feet to 2,350 feet BGL.

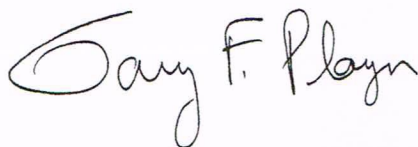
Once the plugs have been drilled out, the well should be pressure tested by filling it with water and applying about 200 psi pressure at the surface. Once the casing is proven to be intact, the next step will be to enter the casing with a perforating gun and fire 24 to 48 shots through the casing in the interval from 2,480 feet to 2,610 feet BGL.

Wells drilled into the same Qm zone at Quichapa Creek and at the base of the Pine Valley Mountains southwest of New Harmony are very productive of high quality water. The closest well (Quichapa) penetrated only the first two hundred feet of the Qm, but was producing at a rate of about 150 gallons per minute by air lift while the well was being drilled. Wells at New Harmony have been pump tested at rates on the order of 2,500 gallons per minute with little drawdown.

If the initial flow of water from the perforated intervals appears to be indicative of high porosity and permeability in the zone tested, then it would be appropriate to fire additional shots, and then set a 5" diameter, gravel packed slotted liner inside of the 9 5/8" casing in order to control possible entry of loose silt and sand during long term production. Exact details of the completion should be settled upon by consulting with your engineering staff and the drilling company chosen to test and then complete the well.

I believe that Grimshaw Drilling could quickly provide the District with a reasonable estimate of the price to reenter and hopefully complete the well. I have retained all available well records, and could provide them as needed.

Sincerely,



Gary F. Player  
Consulting Geologist  
Utah Professional Geologist No. 5280804-2250

C:\Users\Gary\Google Drive\Gary's Folder\ARCO THREE PEAKS\REENTRY LETTER TO CICWCD 101714.wpd

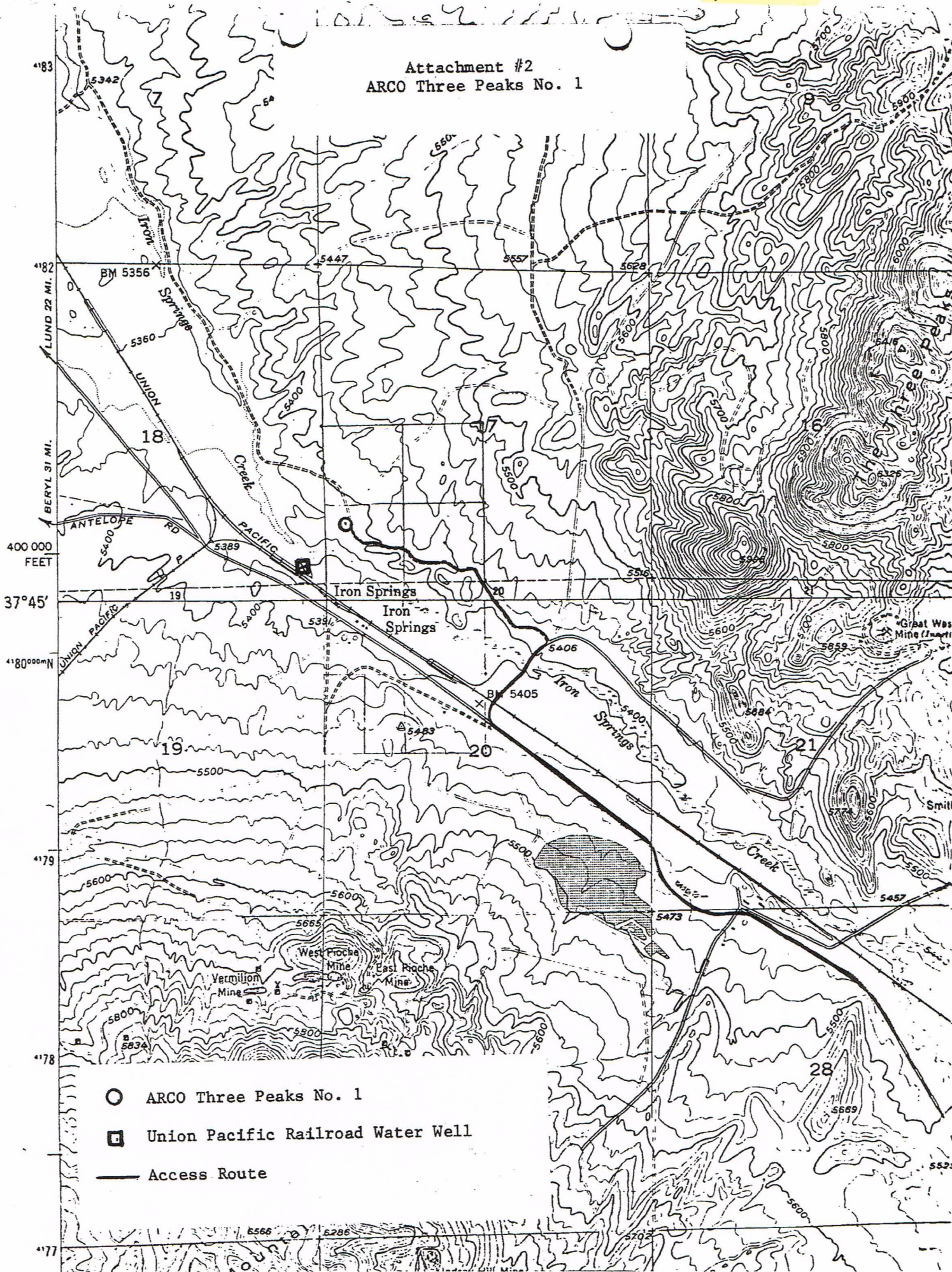


120122

Attachment #2  
ARCO Three Peaks No. 1

The Three Peaks Quad

Cedar City NW Quad





# 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. (formations, all types electric, etc.), formations 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: "Seals 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.)

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27. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT BONES OF DEPTH INTERVAL TESTED, CEMENT USED, THIS TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERING		28. GEOLOGIC MARKERS	
FORMATION	TOP	DEPTH	TRUE VERT. DEPTH
DST #1	11640	900	
Core #1	5018	2322	3 = 3,964
Core #2	11646	6286	
Core #3	11991	8229	
Core #4	13359	9352	
		11597	
		12130	
		12662	
		13758	
		14535	
		15451	
PLUGGED AND ABANDONED:			
Plug #1	Set cement retainer @ 11590. Squeeze perfs 11642-11688 with 100 sx Class "H" neat + adds		
Plug #2	Pump 50 sx Class "H" + adds from 7054-6924		
Plug #3	Perf'd 4 holes in 9-5/8" casing @ 2350. Spotted 80 sx neat 205' into tubing by 9-5/8" annulus. Cement from 2250-2350 in 13-3/8" x 9-5/8" annulus and from 2225-2375 inside 9-5/8" casing		
Plug #4	Pumped 20 sx cement surface plug from + 25' to GL		
Plug #5	Mixed and spotted 10 sx cement inside cut off 13-3/8" x 9-5/8" casing. Weld cap over 13-3/8" casing cut off + 4' below GL.		



TIGHT HOLE

MAR 15 1985

SUB IN TRIPLICATE  
OTHER INSTRUMENTS  
Transfer only

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 rock  
Use "APPLICATION FOR PERMIT—" for such proposals.

OIL ☐ GAS ☒ OTHER ☐

NAME OF OPERATOR

ARCO Oil and Gas Company, Division of Atlantic Richfield Company

ADDRESS OF OPERATOR

P.O. Box 5540, Denver, Colorado 80217

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

At surface

1005' FSL &amp; 350' FWL

PERMIT NO.

43-021-30006

18. ELEVATIONS (Show whether OF, RT, GL, etc.)

5391' GL

3. LEASE DESIGNATION AND SERIAL NO.

FEE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

NA

7. UNIT AGREEMENT NAME

Iron Springs Unit

8. FARM OR LEASE NAME

ARCO Three Peaks

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., E., OR S.E. AND  
SURVEY OR AREA

17-35S-12W

12. COUNTY OR PARISH

Iron

13. STATE

Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON ☒CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT ☐

(NOTE: Report results of multiple completion or Well Completion or Recompletion Report and Log (WRC/L))

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.)

Permission is hereby requested to Plug and Abandon the ARCO Three Peaks #1 well as is described below and was verbally agreed upon by John Bazza with the State Oil & Gas Commission and Jim Onisko with ARCO on 3-8-85.

Before setting the final cement plugs the reserve pit fluid will be injected within the Kaibab zone from 11,640' to 11,695'. The surface pressure less friction losses while injecting will not exceed 2000 psi.

Cement plugs will then be set as follows:

- Plug #1 Set cement retainer @ 11,590'. Squeeze Kaibab perms with 75 sx Class "H" cement
- Plug #2 7050'-6920' cement with 50 sx Class "H" cement
- Plug #3 2350'-2225' perforate 4 holes @ 2350' and set 80 sx Class "H" balance plug followed by Bradenhead squeeze leaving 125' cement inside 9-5/8" casing and 100' inside 9-5/8" x 13-1/2" annulus.
- Plug #4 25'-Surface within 9-5/8" casing and all annuli.

All casing will be cut 4' below GL and a dry hole steel plate will be welded to the casing. The surface owner has requested that a dry hole marker not be used.

APPROVED BY THE STATE

OF UTAH DIVISION OF

OIL, GAS, AND MINING

-11-85

I hereby certify that the foregoing is true and correct

SIGNED *John R. Bazza*  
J. R. Bazza

Operations Manager

DATE: 3/12/85

BY: *John R. Bazza*

APPROVED BY

CERTIFICATE OF APPROVAL IF ANY:

TITLE

DATE



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

STAMP IN DATE  
(See other instructions  
on reverse side)

56 64 01

13

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## WELL COMPLETION OR RECOMPLETION REPORT

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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 \_\_\_\_\_

2. NAME OF OPERATOR  
ARCO Oil and Gas Company, Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR  
P.O. Box 5540, Denver, Colorado 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 1005' FSL & 350' FWL  
At top prod. interval reported below ---  
At total depth ---

RECEIVED  
MAR 25 1985  
DIVISION OF OIL  
GAS & MINING  
API 43-021-30006

5. LEASE DESIGNATION AND SERIAL NO.  
FEE8. IF INDIAN, ALLOTTEE OR TRIBE NAME  
NA7. UNIT AGREEMENT NAME  
Iron Springs Unit5. FARM OR LEASE NAME  
ARCO Three Peaks9. WELL NO.  
110. FIELD AND POOL, OR WILDCAT  
Wildcat11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
17-35S-12W12. COUNTY OR PARISH  
Iron13. STATE  
Utah

15. DATE SPUDDED 6-14-84 16. DATE T.D. REACHED 1-11-85 17. DATE COMPL. (Ready to prod.) P&A 3-15-85 18. ELEVATIONS (OF RES. RT. GR. ETC.)\* 5390' GL 5417' KB 19. ELEV. CASINGHEAD 5390'

20. TOTAL DEPTH, MD & TVD 15,590' 21. PLUG, BACK T.D., MD & TVD P&A Surface 22. IF MULTIPLE COMPL. HOW MANY\* P&A 23. INTERVALS DRILLED BY 0-15,590' 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* PLUGGED AND ABANDONED 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN  
DLL/Sonic/GR-Calip; DLL/MSFL; FDC/CNL; LDT/CNL; BHC-Sonic 27. WAS WELL CORDED YES

29. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	-----	112' KB	-----	Conductor	-----
13-1/2"	81.4#	2422' KB	17-1/2"	2405 sx + top job of 350	sx ---
9-5/8"	47#	11640' KB	12-1/4"	1400 sx - 2 stage	---

29. LINER RECORD				30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)
7"	11,219'	12,239'	225 SX	---	---	P & A

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL	SIZE	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
12137-12143'		12137-12143'	squeeze with 60 sx Class "H"
11698-11753'		11698-11753'	3300 gal acid + adds + 10,000
11642-11688'		11698-11753'	flush + 1500 SCF N <sub>2</sub> + 200 B
		11698-11753'	squeeze with 75 sx Class "H"

33. PRODUCTION

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

DATE OF TEST \_\_\_\_\_ HOURS TESTED \_\_\_\_\_ CHOKER SIZE \_\_\_\_\_ PROD'N. FOR TEST PERIOD \_\_\_\_\_ OIL—BSL. \_\_\_\_\_ GAS—MCF \_\_\_\_\_ WATER—BSL. \_\_\_\_\_ GAS-OIL RATIO \_\_\_\_\_

PLUGGED AND ABANDONED

FLOW, TUBING PRESS. \_\_\_\_\_ CASING PRESSURE \_\_\_\_\_ CALCULATED 24-HOUR RATE \_\_\_\_\_ OIL—BSL. \_\_\_\_\_ GAS—MCF. \_\_\_\_\_ WATER—BSL. \_\_\_\_\_ OIL GRAVITY-API (CORR.) \_\_\_\_\_

PLUGGED AND ABANDONED

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) \_\_\_\_\_ TEST WITNESSED BY \_\_\_\_\_

35. LIST OF ATTACHMENTS  
Daily Well History

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

SIGNED L.B. Morse TITLE Operations Manager DATE March 21, 1985

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

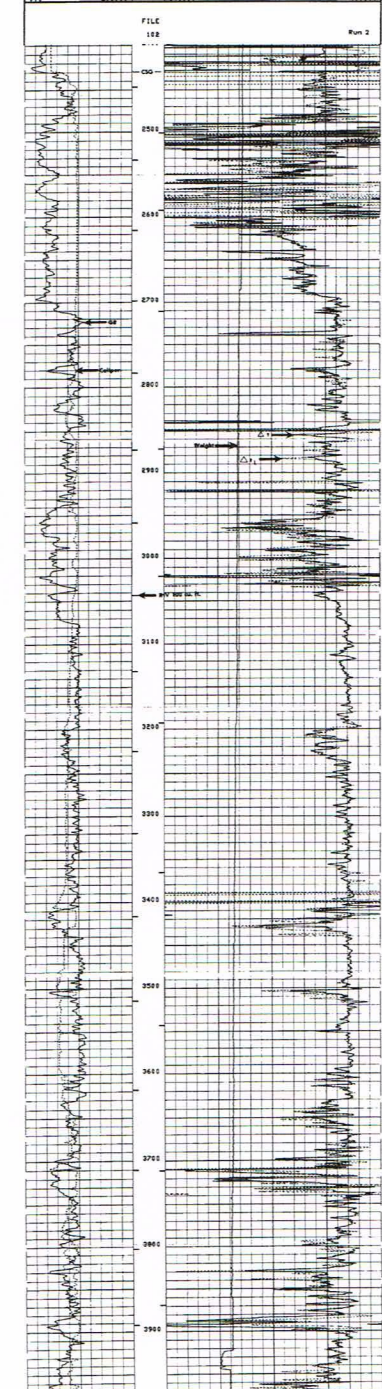


[illegible]

REMARKS:				Run 1
CREDI HICKLE 485 PPM CALORIES				
EQUIPMENT NUMBERS:				
SLC 639	SLC 1471	WDM 58	SLC 2145	
REMARKS:				Run 2
FILL VOLUME AT 8000-8400-8500-3750-3200 CREDI KIBLAND, CHAPMAN				
EQUIPMENT NUMBERS:				
SLC 1892	SLC 891	SLC 761	SLC 2458	
REMARKS:				Run 3
TOOL WAS NOT RUN DOWN TO THE FISH IN THE HOLE CREDI/STANLEY, ANDERSON				
EQUIPMENT NUMBERS:				
SLC 1824	SLC 159	MDC 2864	SLC 3407	
ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL LOG AND INFORMATION. THEY ARE NOT GUARANTEED. THE ACCURACY, COMPLETENESS OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF NEGLIGENCE OR WILLFUL MISCONDUCT ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE OTHER THAN OUR EMPLOYEES. ANY OF OUR EMPLOYEES WHOSE NAMES ARE LISTED EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS AND CONDITIONS OF SERVICE AND OUR CURRENT PRICE SCHEDULE.				

Top  $Q_m = 2322$

		TENSILE	
		5000.0	0.0
10.000	EMISSIN	140.00	RTN (US/F)
20.000			40.000
9.0	GR (GAPI)	140.00	RT (US/F)
200.00			40.000



fractured? 2,500' - 2,615'

fractured? 2,960' - 3,050'

ARCO Three Peaks #1



# Density - Neutron Log

<b>RECEIVED</b> CHEM. ENG. DEPARTMENT 1000 10th St. N.E. ALBUQUERQUE, N.M. 87102 TEL. 278-1234 FAX 278-5678	
<b>LOG DATA</b> LOG NO. 1000 DATE 10/1/84 TIME 10:00 WELL NO. 1000 HOLE NO. 1000 LOGGERS 1000 SURVEYOR 1000 CHECKED 1000 APPROVED 1000	
<b>LOG DESCRIPTION</b> LOG TYPE 1000 LOG LENGTH 1000 LOG START 1000 LOG END 1000 LOG INTERVAL 1000 LOG SCALE 1000 LOG UNIT 1000 LOG CORRECTION 1000 LOG REMARKS 1000	

REMARKS:

CALIBRATION FILMS WILL BE ATTACHED TO FINAL PRINTS  
 CROW KIRKLAND, ANDERSON  
 PDM REPEATABILITY IS DUE TO THE HOLE CONDITION

EQUIPMENT NUMBERS:

DRS 2824	MDR 991	PDM 8783	GR 6996
CNC 259	CNS 3345	SDM 8783	SDM 8783

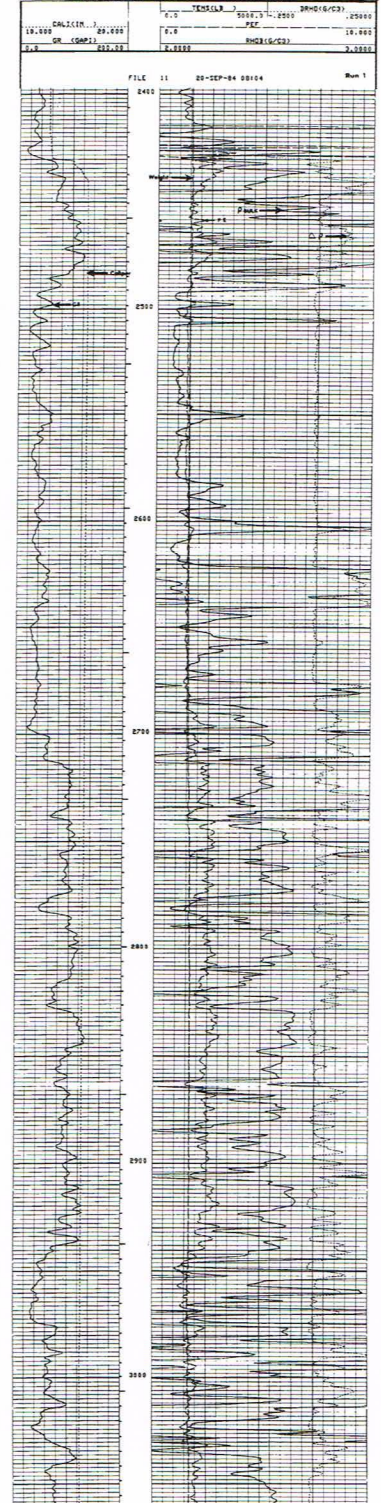
REMARKS:

TOOL WAS NOT RUN DOWN TO THE FISH IN THE HOLE  
 CROW KIRKLAND, ANDERSON  
 EXTRA LENGTH ON LOGS FOR DEPTH TO FISH IN THE HOLE

EQUIPMENT NUMBERS:

DRS 2824	MDR 991	CNC 259	CNS 3345
PDM 8783	PDM 8783	PDM 8783	PDM 8783

ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCE FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE, THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS AND WE SHALL NOT BE LIABLE IN THE CASE OF ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE REGARDING SUCH INTERPRETATIONS. THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE BOOK.

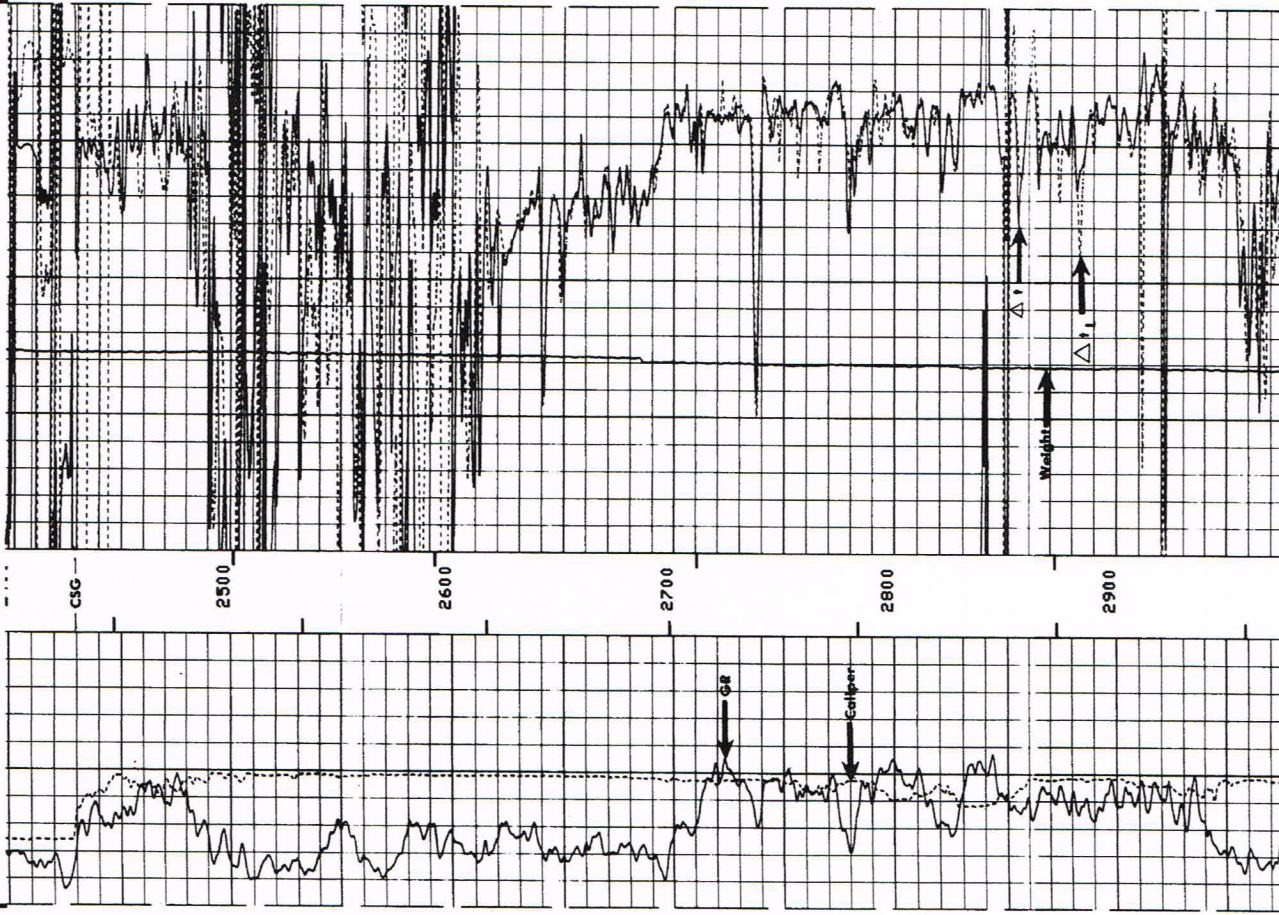




CALIB IN		TENS(LB)	
10.000	20.000	5000.0	0.0
GR (GAPI)		DTL (US/F)	
0.0	200.00	140.00	40.000
		DT (US/F)	
		140.00	40.000

FILE 102

Run 2



ARCO  
Three Peaks No. 1  
Sonic log  
All Quartz Monzonite  
Note fracturing from  
2490 - 2610!!



ARCO

Three Peaks No. 1

DIL

Top Monzonite 2322

Note low resistivity

(= high  $\phi$ ?)

from 2490 - 2620!

