

ARCO Oil and Gas Company **Well History - Initial Report - Daily**

Instructions: Prepare and submit the "Initial Report" on the first Wednesday after a well is spudded or workover operations are started. Daily work prior to spudding should be summarized on the form giving inclusive dates only.

District WESTERN		County, parish or borough COLUMBIA		State OR	
Field MIST		Lease or Unit COLUMBIA COUNTY		Well no. 42-8-54	
Auth. or W.O. no. API: #009-00197		Title NEW DRILL			
769'N & 1144'W OF THE SE 1/4 COR S8/T5N/R4W, WB&M					
Operator ARCO OIL AND GAS COMPANY				ARCO W.I. 100%	
Spudded or W.O. begun		Date	Hour	Prior status if a W.O.	
SPUDED		6/24/88			
Date and depth as of 8:00 a.m.					
Complete record for each day reported					
-1 6-23-88	COLUMBIA COUNTY #42-8-54 (Columbia County, OR) Paul Graham #4 AFE #R46869 TD: 30' (0') MIRU (13-3/8" @ 40')				
	MIRU. Rig transported from Rio Vista to location in a number of small pieces to meet Oregon State Highway Regulations. Expect to spud 6/24/88.				
-2 6-24-88	TD: 30' (0') - MIRU				
2-1/2 6-27-88	Plan to spud around noon today. TD: 1605' (1575') - Drlg MW: 10.0 VIS: 42 (7" @ 480')				
3-1/2 6-28-88	Spud 1800 hrs 6/24/88. Drl'd to 480'. Ran and cmt'd 11 jts 7" 23# K-55 STC to 480' w/ 200 sx Cl "G" w/ 2% CaCl ₂ , 1/4 #/sx flocele mixed @ 15.8 ppg. Dsp'd w/ 18 bbls. Had 11 bbls cmt rtns. Cut 7" and inst'd wellhead. NU BOP and tstd same. Drl'd FC and tstd csg to 1000 psi. Drl'd FS. Drl'd to 1605'.				
	TD: 2255' (650') - RIH MW: 10.1 VIS: 40				
4-1/2 6-29-88	Drl'd to 2255'. ST to 480'. C&C f/ logs. POOH. Ran DIL/BHC/GR/Cal f/ 2255'-480'. Ran FDC/CNL/GR f/ 2255'-1840'. RIH.				
	TD: 2255' (0') - WO CBL & Perf MW: 10.1 VIS: 40 (3-1/2" @ 2255')				
	RIH to 2255'. C&C mud. POOH. Ran 78 jts 3-1/2" 9.3# J-55 EUE to 2255'. Cmt'd w/ 277 sx "G" w/ 5% KCl, 1% Hallad 322, + 0.2% super CBL, F/B 154 sx "G" w/ 5% KCl, 1% Hallad 322, 0.2% super CBL. Disp w/ 19 bbls 5% KCl wr. Had 2 bbls cmt rtns. Bmpd plug. Set slips. ND BOP. Inst'd flange + tree. RR 0430 hrs 6/29/88.				
WORKOVER					
1 8-08-88	RU Otis. Swab well to 1800'. R/D Otis unit. R/U Atlas perf gun and lubricator. R/U nitrogen testing unit. Test lubricator. Shot 4 JSPF f/1849'-1859'. Surf pressure build to 700 psi. POOH w/gun stuck @ 1526'. Work stuck perf gun. Work up to 1486', unable to free gun. RU Howco to kill well if needed. Pull out of rope socket @ 1400#. POOH w/line. Hung up in lubricator. Line broke. Lost approx 150' 5/16" electric line in hole. R/D Atlas. Secure well.				

The above is correct
Signature: *R.D. Jatta* Date: *3/8/89* Title: **DISTRICT DRILLING ENGINEER**

For form preparation and distribution, see Procedures Manual, Section 10, Drilling, Pages 86 and 87.

Number all daily well history forms consecutively as they are prepared for each well. Page no. **243**

AR3B-459-1-D

Daily Well History - Interim

Instructions: This form is used during drilling or workover operations. If testing, coring, or perforating, show formation name in describing work performed. Number all drill stem tests sequentially. Attach description of all cores. Work performed by Producing Section will be reported on "Interim" sheets until final completion. Report official or representative test on "Final" form. 1) Submit "Interim" sheets when filed out but not less frequently than every 30 days, or 12 on Wednesday of the week in which oil string is set. Submit weekly for workovers and following setting of oil string until completion.

District WESTERN		County or Parish COLUMBIA		State OR	
Field MIST		Lease or Unit COLUMBIA COUNTY		Well no. 42-8-54	
Date and depth as of 8:00 a.m.					
Complete record for each day while drilling or workover in progress					
2 8-10-88	RU flare line w/ Merla tester (1-1/4" orifice) and gauges. Overnight SICP = 726 psi. Open well on 4- point test 11/64" - FCP 707 psi, 495 MCFPD, Merla P = 4.25; 14/64" - FCP 670 psi, 915 psi, Merla P = 12.5; 15/64" - FCP 650 psi, 1064 MCFPD, Merla P = 16; 12/64" - FCP 675, 729 MCFPD, Merla P = 8.5. Take 2 gas samples for analysis. Shut in and secure well. RD test equipment.				

The above is correct
Signature: *R.D. Jatta* Date: *3/8/89* Title: **DISTRICT DRILLING ENGINEER**

For form preparation and distribution, see Procedures Manual, Section 10, Drilling, Pages 86 and 87.

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AR3B-459-2-C

Daily Well History - Final Report

Instructions: Prepare and submit the "Final Report" on the first Wednesday after a well has been assigned or well is plugged, abandoned, or sold. "Final Report" should be submitted also when operations are suspended for an indefinite or appreciable length of time. On workovers when an official test is not required upon completion, report completion and representative test data in blocks provided. The "Final Report" form may be used for reporting the entire operation if space is available.

District WESTERN		County or Parish COLUMBIA		State OR			
Field MIST		Lease or Unit COLUMBIA COUNTY		Well no. 42-8-54			
Auth. or W.O. no. API #009-00197		Title NEW DRILL					
769'N & 1144'W OF THE SE 1/4 COR S8/T5N/R4W, WB&M							
Operator ARCO OIL AND GAS COMPANY				Total number of wells (active or inactive) on this cost center prior to plugging and abandonment of this well 100%			
Spudded or W.O. begun		Date	Hour	Prior status if a W.O.			
SPUDED		06/24/88	1800 hrs				
Date and depth as of 8:00 a.m.							
Complete record for each day reported							
ALL MEASUREMENTS KR = 10' GROUND ELEVATION: 916'							
TOTAL DEPTH: 2255' PBD: Surface JUNK: 150' wireline & guns in 3-1/2" casing.							
CASING DETAIL:							
Casing Size	Top of Casing	Shoe Depth	Weight	Grade Connection	New/Used	Hole Size	SX/CF Cement
13-3/8"	10'	40'	45.5#	K-55	New	Conductor	
7"	10'	480'	23#	K-55	New	9-7/8"	200 sx
3-1/2"	10'	2255'	9.3#	J-55	New	6-1/4"	431 sx
E-Logs:							
DIL/BHC/GR/CAL:		2255'-480'					
FDC/CNL/GR:		2255'-1840'					
Perforations: 4 JSPF 1849'-1859'							
Old TD N/A		New TD 2255'		PB Depth N/A			
Released rig 0430 hrs		Date 06/29/88		Kind of rig Rotary (Paul Graham #4)			
Classifications (oil, gas, etc.) Gas			Type completion (single, dual, etc.) Single				
Producing method Flowing			Official reservoir name(s) Clark and Wilson				
Well no.	Date	Reservoir	Producing Interval	Oil or gas	Test time	Production	
						Oil on test	Gas per day
Pump size, SPM X length	Choke size	T.P.	C.P.	Water %	GOR	Gravity corrected	Allowable
							Effective date

The above is correct
Signature: *R.D. Jatta* Date: *3/8/89* Title: **District Drilling Engineer**

For form preparation and distribution, see Procedures Manual, Section 10, Drilling, Pages 86 and 87.

ARCO Oil and Gas Company
4550 California Ave.
Bakersfield, CA 93309

Kwang U. Park 3/8/89
Kwang U. Park
District Number Superintendent

Number all daily well history forms consecutively as they are prepared for each well. Page no. **143**

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