

# Walsh

ENGINEERING & PRODUCTION CORP.

PETROLEUM ENGINEERING  
RESERVOIR STUDIES  
EVALUATIONS  
GEOLOGICAL STUDIES  
LEASE MANAGEMENT  
CONTRACT PUMPING  
DRILLING SUPERVISION  
WORKOVER SUPERVISION

EWELL N. WALSH, P.E.  
President

## RE-ENRTY TO SHUT OFF GAS

NEW MEXICO OIL CONSERVATION COMMISSION

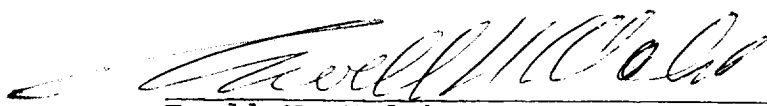
ALLAN NO. 1

SECTION 23-T29N-R13W

San Juan County, New Mexico

March 2, 1982



  
Ewell N. Walsh, P.E.  
State of New Mexico  
Registration No. 4324

RE-ENTRY TO SHUT OFF GAS

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1/29/82 Move in back hoe and install 5-1/2" and 20", refill and move in rig equipment and rig up.

1/30/82 Continue to rig up. Mix mud and start drilling 4-3/4" hole at 6:00 AM 1/31/82 with depth of 400'. Drilled 17 hours, viscosity 34, average feet per hour 23.5'.

1/31/82 Continue to drill from 400' to 570'. Change bits and drill to 764'. At 6:00 AM viscosity 31, weight 9.1. Drilling rate 4 minutes per foot.

2/1/82 Continue to drill 764' to 957' with bit No. 2 a 4-3/4". Circulate, dropped totco and pulled out of hole. Survey 1/2 degree and rig in hole with 2-7/8" tubing as casing string. Ran 1 pup and 31 joints measuring 946.59' plus 2 feet land down. Shoe at 948' stop at 938', ran cement at 90 feet. Circulate and rig Dowell and cement with 10 barrels of mud flush followed by 100 sacks Class "B" neat cement with 2% Calcium Chloride followed by 1 barrel acid and displace with water. Plug failed to stop after 1 barrel over. W.O.C.

2/2/82 Continue to wait on cement. Release string and remove landing nipple and blow out preventer equipment. Install 2-7/8" valve. Ran depth meter to 937'. Close valve and install bull plug and continue to wait on cement. Remove pipe, drill string, mud and move out rig equipment.

2/3/82 Continue to move out rig equipment and clean location. Wait on cement.

2/4/82 Rig up wire line unit. Ran Gamma Ray and Correlation from 936' to surface. Perforate 2 holes per foot from 850' to 855'. Rig Dowell and fail to break down with 4500 psig. Rerig perforation unit and unit wire line twisted up. Pulled out and cut line at 500' to re-head and secure operations at 5:00 PM.

- 2/5/82 Re-perforate 850' to 855' with 2 holes per foot. Rig Dowell and break down with 3800 psig. Pick up 100 gallons of HCL and displace to perforations. Wait 1/4 hour. Pump a total of 60 barrels of water followed by 200 sacks Class "B" neat cement with 2% Calcium Chloride mix at 15.6 ppg. Average pump in 1500 lbs. Displace with 9 barrels water and secure well.
- 2/8/82 Set cast iron bridge plug at 500' and tested to 4500 psig. Test ok. Perforate 355' to 360' with 2 holes per foot. Breakdown with 4000 psig. Pump 50 barrels water and squeeze perforations with 200 sacks of Class "B" neat cement with 2% Calcium Chloride. Mix 15.6 ppg. Final pumping 800 psig. Displace with 6 barrels of water. Job completed.
- 2/11/82 Resqueeze perforations at 355' to 360'. Break down with 2400 psig. Pump 40 barrels water followed by 200 sacks Class "B" Neat cement with 2% Calcium Chloride. Mix at 15.6 ppg. Displace with 6 barrels water. Close in pressure 400 lbs.
- 2/15/82 Meeting with New Mexico Oil Conservation Commission on Allan No. 1
- 2/18/82 Rig Dowell and break down with 1500 psig. Pumping water at 3 bbm. at 1200 to 1400 psig. Pump 16 hours and a total of 3504 barrels or 147,168 gallons. Check test hole for gas.

HOUR	HOLE 1	HOLE 2	HOLE 3	HOLE 4	HOLE 5	HOLE 7
8:00	36%	8%	8%	8%	12%	--
9:30	12%	0%	4%	8%	4%	4%
1:00PM	45%	22%	15%	14%	20%	8%lel
3:00PM	38%	10%	11%	14%	14%	14%lel

HOUR	HOLE 8	HOLE 9	HOLE 11
8:00	--	--	--
9:30	9%	8%	6%
1:00PM	10%	40%lel	4%
3:00PM	4%lel	16%lel	20%lel

- 2/19/82 Continue to pump at 2.6 bpm and at 7:00 am pumped 1096 barrels or 46,032 gallons. Check hole for gas.

HOUR	HOLE 1	HOLE 2	HOLE 3	HOLE 4	HOLE 5	HOLE 7
8:30	50%	15%	18%	18%	14%	12%lel

HOUR	HOLE 8	HOLE 9	HOLE 11
8:30	8%	18%lel	28%lel

Continue to pump to 9:00 and shut down pumping. Total barrels 4233, gallons 177,786. Meter reading at starting was 063903 and ending at 049259 (NOTE: meter runs backward). Release mud tand 2/19/82.

2/20/82            Checking test hole with gas company.

2/22/82            Taking reading on test hole for increase or decrease with gas company and to Aztec with reports.

2/23/82            Meeting with Santa Fe personel for continuous of well.

2/24/82            Asking cementing company for bid on job plus wireline company for perforation and setting plug. Cor-ordinate move in time to low bider on job.

2/25/82            Move in Gearhart wire line unit. Due to wet weather, called Modern Iron 30 ton crane to set in unit. Rig Halliburton and perform squeeze on perforations at 355' to 360' with 200 sacks Class "B" neat cement with 2% Calcium Chloride. Mix at 15.6 ppg with average pump pressure of 1500 lbs. Displace at 10:20. Cast iron bridge plug failed to pass master valve. Wait on cement 3 hours. Change valve and set bridge plug at 330' and tested to 4500 psig. Perforate 307' to 312' with 2 holes per foot. Breakdown with 4100 psig. Mix 200 sacks Class "B" neat cement with 2% calcium chloride . Mix at 15.6 ppg and displace to perforations. Set cast iron bridge plug at 230' and tested to 4500 psig. Test ok. Perforate 174'-179' with 2 holes per foot and break down with 1300 psig. Mix 200 sacks Class "B" neat cement with 2% Calcium Chloride and mix at 15.6 ppg. Displace to perforations. Set cast iron bridge plug at 150' and test to 4500 psig. Perforate 116'-121' with 2 holes per foot. Breakdown with 3100 psig. Mix 200 sacks Class "B" neat cement with 2% Calcium Chloride and mix at 15.6 ppg. Final displace at 6:48. Close valve and move out equipment.