



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Santa Fe
Lease No. 07861
Unit _____

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL	Subsequent Report of Work Done	XI

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 27, 1958

(USA) W. O. Berger

Well No. 1 is located 660 ft. from N line and 1080 ft. from E line of sec. 21

21 26N 11W N.M.P.M.
($\frac{1}{4}$ Sec. and Sec. No.) (Twp.) (Range) (Meridian)

West Abasco Area (WC)
(Field)San Juan
(County or Subdivision)New Mexico
(State or Territory)The elevation of the Kelly Dishing ~~datum~~ above sea level is 6250.10 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding job, cementing points, and all other important proposed work)

MINT. Spudded 6/23/57. Drilled 13-3/8" hole from surface to 221'. Run 269.56' - 9-5/8" 32.3# N-40 male STAC C.F. & I. Casing. Landed casing at 222.61'. Cemented to surface with 2 1/2 sacks. WOC 29 1/2 hours. Pressure tested casing and BOP with 500 psi for 30 minutes. Pressure held. Drilled 7-7/8" hole to 3060'. Cored w/7-3/4" x 3-1/2" Diamond Corehead from 3060' to 5340'. Ramped core hole and drilled 7-7/8" hole from 5340' to 5380'. Took drill stem tests of the following intervals: DST 1, 5030 1/2'-5103'. ISI 33 minutes. Open 1 hour SI 39 minutes. IHP 2596 psi, FHP 2596 psi, IHIP 69 psi IFF 57 psi, FFF 57 psi. PSIP 30 psi. Recovered 30' slightly gas cut mud.
DST #2 - 5132'-5215'. ISI 30 minutes. Open 1 hour. Closed in 30 minutes. 5/8" bottom choke 1" top choke. IHP 2649 psi, FHP 2649 psi, IHIP 2534 psi, IFF 243 psi FFF 391 psi, PSIP 1638 psi. Gas to surface in 14 minutes. Gaged 78 MCFTD decreasing to 43 MCFTD at end of test. Recovered 960' highly gas cut mud.
DST #3 - 5197'-5267'. Mincum

Reverse side.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Tennessee Gas Trans Co.Address RECEIVED

MAR 3 1958

U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

By _____

Patterson Lay
Title District Superintendent

* Core descriptions on reverse side.

DST #4 5197'-5267' Missourian.

Run Schlumberger Electric Survey 5377'-285' and Microlog from 5373-4990', 4310-3088', 2944'-1392', 910'-670'. Run 5-1/2" 14# J-53 CPW Sals casing to 5376', cemented with 100 sacks. MOST. MINUT. Cleaned out to 5338'. Perforated 5290'-5325' with 4 jets per foot. Sand free with 20,000# sand in 20,000 gallons crude. Gaged 1,545 MCF gas per day. Set Baker Magnesium Bridge Plug at 5281-5283' with 5' Calceal 5276'-5281'. Perforated 5221'-5260'. Sandfree with 20,000# sand in 20,000 gallons lease crude blended with .14/gallon addmide. Set bridge plug 5216-5218' with Calceal cap 5213-5216. Perforated 5152'-5202' with 2 shots per foot. Sandfree with 14,532# sand in 14,532 gallons lease crude. Treated with 500 gallons mud acid. Run tubing, sand free with 20,000# sand in 22,848 gallons galled crude treated with 1400# addmide. Sand free with 23,900# sand in 23,900 gallons lease crude. Drilled bridging plug and calceal 5213'-5218' and cleaned out to 5276'. Run 2" tubing, put on production. Recovered load oil 2/1/58. Potential test 2/13/58, flowed 10 BOWB, 0 water through 1" choke. GOR 21,900 ft³/bbl.

CORE NO. 1 - 5060'-5077' (17') Recovered 10-1/2' Gallup formation.

5060'-5068' (8') Shale, hard, gray, with sand & lime partings. Vertical fractures throughout. H.S.

5068-5074 1/2' (6 1/2') Not recovered.

5074 1/2'-5077' (2 1/2') Shale, hard, gray with sand and lime parting. No apparent show.

CORE NO. 2 - Gallup formation - 5077'-5103', cut 26', recovered 26'.

5077'-5084' (7') Shale, dark gray to black with thin partings calc. ss. One vertical fracture. No apparent show.

5084'-5091' (7') Shale as above w/no vertical fractures. No show.

5091'-5103' (12') Shale as above w/1 vertical fracture entire length.

CORE NO. 3 - Gallup formation - 5103'-5153' Cut 50'. Recovered 50'.

5103'-5140 1/2' (37 1/2') Shale, black, carb, fossiliferous with thin ss lenses, spotty show in lenses.

5140 1/2'-5144' (3 1/2') Shale as above with one vertical fracture entire length. Spotty show in sand.

5144'-5153' (9') Shale as above. No fractures. Slight odor on fresh break.

CORE NO. 4 - Gallup formation - 5153'-5187 1/2' (34 1/2') recovered 33 1/2'.

5153'-5154' (1') Shale, black, carb. fine, silty spotty show.

5154'-5156' (2') Shale as above with thin lenses of very fine grain ss. One vertical fracture. No show.

5156'-5158' (2') Shale as above with no vertical fractures. No show.

5158'-5164' (6') Shale as above with thin laminations of very fine grain ss. One vertical fracture. Tight spotty show.

5164'-5170' (6') ss, very fine grain to silty with thin laminations and parts of shale. One vertical fracture bleeding oil and gas along bedding planes. Good stain and odor. (40% shale)

5170'-5179' (9') As above without vertical fracture and with increase in sandstone. Bleeding oil and gas.

5179'-5181' (2') As above. No vertical fracture. One odor.

5181'-5186 1/2' (5 1/2') Shale, silty with two vertical fractures 5181-5183, four vertical fractures 5183-5186 1/2', odor on break.

5186 1/2'-5187 1/2' (1') Not recovered.

CORE NO. 5 - 5187 1/2'-5215' (27 1/2') recovered 15 1/2' as follows:

5187 1/2'-5197 1/2' (10') Siltstone with shale lenses and partings. 30% shale. Bleeding gas along bedding planes.

5197 1/2'-5203' (7 1/2') Shale, hard, black, carbonaceous with silt and lime partings.

5203'-5215' (12') Not recovered.

USA - W. O. BERGER No. 1, San Juan County, New Mexico.

CORE NO. 6 - 5215'-5225' (10') Recovered 8'. Gallup formation.

5215'-5223' (8') Shale, black, carb. calc, with 1 vertical fracture entire length of core. No apparent show.
5223'-5225' (2') Not recovered.

CORE NO. 7 - 5225'-5248' (23') Recovered 21½'.

5225'-5238' (13') Shale, blk, hard, with silt and lime partings. 1 vertical fracture. Bleeding gas throughout.
5238'-5239½' (1½') Lim. sand and shale, as very fine grain hard, tite, bleeding oil and gas along fracture and bedding planes.
5239½'-5246½' (7') Shale black, hard w/sand and lime partings. One to two vertical fractures throughout. Bleeding gas.
5246½'-5248' (1½') Not recovered.

CORE NO. 8 - 5248'-5267' (19') Recovered 17'. Gallup formation.

5248'-5267' Recovered 17'.
5248'-5265' Shale, black, hard with streaks siltstone and lime. Vertical fractures 5249-50', 5250½-51', 5256½-62½', 5264-66'.
Bleeding gas throughout.
5265'-5267' Not recovered.

CORE NO. 9 - 5267'-5310' (43') Recovered 37' Gallup formation.

5267'-5269' (2') Shale blk w/streaks, 6" stk bent at 5268½-5269'. One vertical fracture. Slt gas bleeding along fracture.
5269'-5270' (1') Shale as above. No vertical fracture. Gas odor on fresh break.
5270'-5270½' (½') Shale as above, with one vertical fracture.
5270½'-5272½' (2') Shale as above, no vertical fracture.
5272½'-5274' (1½') Shale as above with one vertical fracture.
5274'-5276' (2') Shale as above. No fractures.
5276'-5287' (9') Shale as above with vertical fracture. Oil and gas along fracture.
5287'-5289' (2') Shale as above with no vertical fracture.
5289'-5294' (5') Shale, sandy calc. bleeding O&G. One vertical fracture.
5294'-5297' (3') ss, fn. grain, shaly, calc poor to fair porosity & permeability. Bleeding O & G throughout.
5297'-5304' (7') ss, fn to med. grain, calc, scattered thin shale partings. Poor to fair porosity & permeability. Heavy bleeding gas & distillate. throughout. One vertical fracture.
5304'-5310' (6') No recovery.

CORE NO. 10 - 5310'-5340' (30') Recovered 11½' Gallup formation.

5310'-5321½' (11½') ss, fine to med. grain, dirty, shaley with streaks shale scattered throughout. Scattered V.F.s at 20' to vertical scattered throughout.
5321½'-5340' (18½') Not recovered.

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FARMINGTON, NEW MEXICO



