

DATE March, 1957

THE OHIO OIL CO

HISTORY OF OIL OR GAS WELL

FIELD Blanco-Mesaverde
(La-Plata)

WELL NO. 1 LEASE Government BLOCK SEC. 20 TWP. 31N R. 12W
 STATE New Mexico PARISH San Juan COUNTY San Juan

MEASUREMENTS
 TAKEN FROM K.B. ELEV. 6084'
Grnd ELEV. 6072'
 TOP OF OIL STRING Grnd ELEV. 6072'
 TOP OF ROTARY TABLE Grnd ELEV. 6072'
 LOG. OR MAY Grnd ELEV. 6072'

HISTORY PREPARED BY George Susich

TITLE _____

IT IS OF THE GREATEST IMPORTANCE TO HAVE A COMPLETE HISTORY OF THE WELL. USE THIS FORM IN REPORTING THE HISTORY OF ALL IMPORTANT OPERATIONS AT THE WELL. TOGETHER WITH THE DATES THEREOF. INCLUDING SIZE OF HOLE. SIZE AND NUMBER OF BITS. COMPLETE DESCRIPTION OF Casing, Cementing, Fishing or Drilling Difficulties. SURVEYS. ALL TESTS. ALL COMPLETION OPERATIONS AND REPAIRS.

DATE
1957

Fleeger Riley Unit 15 Rig.

1/6/57

MIRT and rigging.

1/7/57

Rigging up, drilled rat hole and mouse hole, spudded 15" surface at 7:00 p.m. broke tour.

1/8/57

T.D. 210' Drilled 210', 15" surface hole, ran 6 jts 10-3/4 H-40 32.75# 8R casing:

188.27 Net

11.80 Grnd to K.B.

1.33 Below grnd

201.40 Land string K.B.

Spotted centralizer at 194' K.B. Cemented with 150 sacks regular by HOWCO. Displaced casing with 19.5 bbls. H₂O. Plug down at noon. Good returns on cement. PBTD 177 WOC.

1/9/57

T.D. 737' Nippled up to drill out. Pressured casing with 750#/in² for 1/2 hour. Casing O.K. Top of cement at 160'. Cement from 160' - 201'. Drilling ahead with bit #2, with native mud.

1/10/57

T.D. 1560' Drilling ahead, made trip for bit #3.

1/11/57

T.D. 2435' Drilling ahead made trip for bit #4.

1/12/57

T.D. 2940' Drilling ahead made trip for bit #6. Started mixing mud at 3130'.

1/13/57

T.D. 3304' Drilling ahead, made trip for bit #7.

1/14/57

T.D. 3562' Drilling ahead, made trip for bit #8.

1/15/57

T.D. 3790' Drilling ahead, made trip for bit #9.

1/16/57

T.D. 3955' Drilling ahead with bit #10.

1/17/57

T.D. 4072' Drilling ahead with bit #11. Deviation at 3965' (1/2°).

1/18/57

T.D. 4175' Drilling ahead with bit #12, made trip for bit #13.

1/19/57

T.D. 4308' Drilling ahead with bit #13, made trip for bit #14. Dev. at 4426' (3/4°).



- 1/20/57 T.D. 4478' Drilling ahead with bit #14, made trip for bit #15.
- 1/21/57 T.D. 4630' Drilling ahead, made trip for bit #16.
- 1/22/57 T.D. 4740' Drilled to 4740', circulated 2 hours, came out of hole. Ran Schlumberger, Electrical Survey, Micro Calipher.

Schlumberger Tops:

Fruitland	1950 (+4134)
Pictured Cliffs	2373 (+3711)
Cliffhouse	4022 (+2062)
Manefee	4228 (+1856)

Schlumberger T.D. 4744'.
Drls. T.D. 4740'.

- 1/23/57 T.D. 4740' Went in hole drill pipe, circulated 1 hour. Came out of hole laying drill pipe. Rigged up to run casing. Ran 129 jts 7" O.D. 23# J-55 8R casing:

	4725.42 Net
Baker Whirler float shoe	1.50
Baker float collar	1.51
	<u>4726.93 Total</u>

Spotted centralizer at 4719'. Landed shoe at 4725' with collar at 4679.30. Cemented with 575 sacks regular cement by HOWCO. Displaced casing with 185 bbls. H₂O. Bumped plug with 1200# plug down at 4:00 p.m. Estimated top of cement in annulus at 2300'. PBTD 4678'. Very poor circulating returns after displacing 150 bbls. H₂O. Lost circulation at 180 bbls.

- 1/24/57 T.D. 4740' Ran temp survey found top of cement at 3010'. WOC. Landed casing at 4:00 p.m. Pressured casing with 1000# for 1/2 hour, casing O.K. Started picking up 3-1/2" drill pipe and nipped up. Blowing well of water with gas.
- 1/25/57 T.D. 4810' Blew well clean. Drilled out cement float collar cement from 4680' - 4723'. Drilled out shoe. Open hole from 4725' to 4740'. Dried up well. Drilling ahead. Ran junk sub above bit for iron. Strapped drill pipe out pipe tally O.K.
- 1/26/57 T.D. 4881' Drilled to 4810', blew well 1 hour, had junk sub on string. Came out of hole for core bbl. Cut Core #1, 4810' - 4840'. Cut 30', jammed bbl, rec'd 25.5'. Went in hole to cut Core #2.
- 1/27/57 T.D. 4934' Cut Core #2, 4840' - 4890'. Cut 50' rec'd 50'. Drip gas going into well, build mud ring on core head and 200' below K.B. worked pipe free. Went back in hole with core bbl. Installed drip in gas line. Started cutting Core #3. Cut Core #3 4890' - 4921'. Jammed bbl, cut 31', rec'd 26'. Went in hole to cut Core #4.
- 1/28/57 T.D. 4019' Cut Core #4, 4921' - 4947'. Cut 26', rec'd 21'. Jammed core bbl. at 4947'. Cut Core #5 4947' - 4990'. Cut 43, rec'd 35'. Jammed core bbl. at 4990. Cut Core #6.

1/29/57 T.D. 5075' Finished cutting Core #6, 4990' - 5027'. Jammed core at 5027'. Cut 37', rec'd 34'. Cut Core #7 (5027' - 5046') Jammed bbl. at 5046'. Cut 19' rec'd 17'. Went in hole to cut Core #8, 5046' - 5065'. Jammed bbl. at 5065'. Cut 19', rec'd 14'. Went in hole to Cut Core #9.

1/30/57 T.D. 5115' Finished Core #9, 5065' - 5097'. Jammed bbl. at 5097'. Cut 32', rec'd 32'. Went in hole and cut Core #10, 5097' - 5115'. Cut 18', rec'd 17.5'. Came out of hole for Schlumberger. Blew hole clean for 1 hour. Ran Schlumberger Logs as follows:

Gamma Ray	2200 to 5115
Induction Log	4725 to 5115
Temperature Log	3800 to 5115

Schlumberger T.D. 5114

Drls. T.D. 5115 Top of Point Lookout 4805 (+1279)

1/31/57 T.D. 5115' Went in hole with 6-1/4 bit, reamed rat hole from 4810' - 5115'. Blew well 3/4 hour, came out of hole to run 5" liner. Well making 29,831 Cfgd. natural. Ran 18 jts 5" O.D. 15# J-55 8R liner:

	581.33 Net
Baker whirler shoe	1.57
Burns float collar	1.26
Burns liner hanger	4.28
	<u>588.44 Total</u>

Spotted centralizers at 5105', 4912', 4720'. Landed shoe at 5111' with collar at 5075.22. Cemented with 200 sacks regular 4% gel by HOWCO. Pumped 20 bbl. gel water ahead of cement. Displaced with 43bbl. H₂O. Bumped plug with 1200#. Set seal, reversed out estimated 10 bbl. cement (50 sacks). Plug down at 9:00 p.m. PBT 5075.52'. Used 300% excess cement over calculated fill. Top of liner at 4522.56'. Mixed 14# slurry.

2/2/57 PBT 5079' Cleaned out stringers of cement in liner from 4979' - 5075', dried up hole and blew clean. Drilled float collar and 3' of cement. Came out of hole to perf. PBT 5079' by L.W.

2/3/57 PBT 5079' Perf casing from 5014' - 5034' with 80 E bullets (4/ft.) by L.W. Checked Ohio collars O.K. and shot off same. Sand water frac from 5014' - 5034' with 50,000# (20 - 40) and 83,400 gals. water by Dowell used 5 Allison pump trucks. Broke down perf with 1800#. Treatment psi 2200#, Final pressure 2200#. Sand mixture .6#/gal. with average injection rate 70 bbls/min. Started sand at 1/2#/gal. for 10 min. increased to 1#/gal for remainder of frac. Flushed sand with 300 bbl. H₂O. Set Baker Model "N" Mag bridge plug at 4950' by L.W. Used Ohio collar log and set off same. Corrected L.W. measurements 3'. Perforated casing from 4902' - 4924' with 88 "E" bullets by L.W. Shot off Ohio collar log. Waiting on water.

2/4/57 PBT 5079' Sand water frac from 4902' - 24' with 50,000# (20 - 40) sand and 49,000 gals. of water. Breakdown not apparent. Pumping in at 1400#. Treatment psi 1800#. Gradual build up to 4000#. Sanded up formation. Estimated 11,700# sand in casing, average injection rate for 18 min. 67 bbl./min. Started sand at 1#/gal for 10 min. at 1800#. Increased

- 2/4/57 Cont. to 1-1/2#/gal. Estimate 38,300# sand in formation. Pumped 42 bbl. sand and 49,000 gals. water in 18 min. with 1.04#/gal. Went in hole with drill pipe to clean out sand.
- 2/5/57 PBTD 5079' Continued cleaning out sand, frac water coming into well bore. Stuck float on drill pipe, pumped 120 bbl. water in well to kill gas coming out drill pipe. Came out of hole. Set Baker Model "N" Mag bridge plug at 4895', perforated casing from 4860' - 4890' with 120 "E" Bullets shot and set plug off collar log. Corrected L.W. measurements 3' to collar log. Well blew out on 2nd run with perf gun, closed BOP, pumped 300 bbls. water in well and killed same. Communication between perf from 4860' - 4890' and 4902' - 4924', well blew out after setting plug and perforating bottom section 4884' - 4890'. Sand water frac from 4860' - 4890' with 30,000# (20 - 40) sand and 40,000 gals. H₂O. No apparent break down. Pumping in formation at 1300#. Treatment psi 1300#. Final psi hole on vacuum. Pumped 60 nylon balls down well 1st half stage, no apparent breadkown when balls hit perf. Average injection rate 39.4 bbls./min. with sand mixture at 1#/gal. Injection rate during frac 65.4 bbls./min. Very poor on flush, took 11 min. to pump frac fluid and 9 min. to flush 10,400 gals. of water.
- 2/6/57 PBTD 5079' Went in hole with Baker Model "N" Mag bridge plug set same at 4854', Perforated casing from 4805' - 4850' with 180 "E" bullets (4/ft.) by L.W. Shot and set plug off collar log. Sand-water from 4805' - 4850' with 48,000# (20 - 40) Sand and 56,400 gals. H₂O. No apparent break down. Pumping in at 1100#, final psi 1500#. Pumped 100 nylon balls no apparnet break down. Flushed with 10,500 gals. water with average injection rate of 74.8 bbls./min. with sand at .85#/gal. Hole on vacuum. Repaired rubber on BOP, went in hole to blow out water and drill out retainers. Well unloading at 21 stds in hole, ran in 48 stds in well unloading 2 stds above liner. Blowing out sand and water. Used six Allison pump trucks on all frac one extra truck, compliments of Dowell.
- 2/7/57 PBTD 5079' Continued blowing well, well making some water and sand, drilled out retainers at 4858' and 4895' and 4950'. No noticable increase in gas after drilling out plugs. It is believed that communication exists between all perforations. Continued blowing well.
- 2/8/57 PBTD 5079' Continued blowing well, layed down 3-1/2" drill pipe. Ran 164 jts. 2-1/2" 6.5# 8R J55 tubing:
- | | |
|--------------|-------------|
| 5018.99 | |
| <u>31.21</u> | Anchor |
| 5050.20 | Net |
| <u>10.80</u> | Below K.B. |
| 5061.00 | Landed K.B. |
- Found 11' of sand in bottom of well, tubing landed 7' off sand at 5061' K.B., 18' off PBTD. Hooked up well head and released rig at 9:00 p.m. Shut in well at 9:00 p.m. 2/8/57.
- 2/11/57 PBTD 5079' Went out to check well found 980# on casing and 400# on tubing, blew well, estimate 3 to 4 bbls. water and some oil in tubing, blew well 2 hours. Well making some oil, very little water and sand after blow. Shut well in at 4:30 p.m.

2/19/57 PBTD 5079' Tested well at 1:00 p.m. 3 hours test, 3/4" Choke nipple. Shut-in
1046# casing, tubing 963#. Choke psi 526#, casing flow 743#.
Temperature 81° F, Gravity .68, N= .75. Choke volume, 7400 Mcfd.
AOF 12,620 Mcfd.

DATE March, 1957

THE OHIO OIL CO. LOG AND CORE RECORD

 FIELD Blanco-Mesaverde
(La-Plata)

 WELL NO. 11 LEASE Government BLOCK 20 SEC. 31N T 12W

 STATE New Mexico PARISH San Juan COUNTY San Juan

*Geograph TD - 5115' Schlumberger TD - 5114'

 MEASUREMENTS
TAKEN FROM

TOP OF OIL STRING	ELEV.
TOP OF ROTARY TABLE	<u>K.B.</u> ELEV. <u>6084'</u>
GRD. OR MAT	ELEV. <u>6072'</u>

CORE DESCRIBED BY M. J. Davis W. A. ColeTITLE Associate Geologists

DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
4810'	4840'	30'	Core #1	25.5'	
4810	4811				Ss, f grn, buff to lt brn, dns w/ clear qtz grns and glaucic,
4811	4812				Ss, as above.
4812	4813				Ss, f grn, buff to lt brn, dns w/ minor amts glauc & blk min grns.
4813	4814				Ss, as above.
4814	4815				Ss, as above w/increase blk mins.
4815	4816				Ss, salt & pepper to lt tan w/increase ferro-mag mins & glauc, dns w/clear qtz grns.
4816	4817				Ss, f grn, as above w/occ rose qtz and occ glauc, dns.
4817	4818				Ss, as above.
4818	4819				Ss, f grn, slt & pepper, glaucic w/ some horizontal fracs.
4819	4820				Ss, as above, w/thin blk sh parts.
4820	4821				Ss, f grn, slt & pepper, as above, tite w/some hairline horiz fracs.
4821	4822				Ss, f grn slt & pepper, tite.
4822	4823				Ss, as above, w/v thin sh parts.
4823	4824				Ss, as above, w/increase blk sh parts & horiz fracs along parts.
4824	4825				Ss, as above.
4825	4826				Ss, f grn, dk gry, non-calc grading to almost platy.
4826	4827				Ss, as above.
4827	4828				Ss, f grn, slt & pepper, glaucic, tite.
4828	4829				Ss, as above.
4829	4830				Ss, f grn, dk gry w/sh parts.

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MEASUREMENTS TAKEN FROM
 TOP OF OIL STRING _____ ELEV. _____
 TOP OF ROTARY TABLE K.B. ELEV. 6084'
 GRD. OR MAT _____ ELEV. 6072'
 CORE DESCRIBED BY _____
 TITLE _____

DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
4830'	4831'		Core #1		Ss, as above.
4831	4832				Ss, as above w/sli horiz fracs.
4832	4833				Ss, f grn, lt gry, slt & pepper, dns & occ sh parts.
4833	4834				Ss, as above.
4834	4835				Ss, as above, dk gry w/occ vert fracs.
4835	4835.5				Ss, as above w/no visable fracs.
NO RECOVERY FROM 4835.5' to 4840'					
4840'	4890'	50'	Core #2	50'	
4840	4841				Ss, f grn, dk gry, tite, sli mica, no apparent fracs.
4841	4842				Ss, as above.
4842	4843				Ss, as above.
4843	4844				Ss, as above w/v thin sh parts.
4844	4845				Ss, as above.
4845	4846				Ss, as above.
4846	4847				Ss, f grn, slt & pepper, dns w/glauc.
4847	4848				Ss, as above w/fine sh laminae.
4848	4849				Ss, f grn, glaucic, w/mica & calc cement, no visible fracs.
4849	4850				Ss, as above, non-calc.
4850	4851				Ss, as above, v glauc, w/some small vert & Horiz fracs.
4851	4852				Ss, as above.
4852	4853				Ss, as above.

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(La-Plata)

 WELL NO. 1 LEASE Government BLOCK SEC. 20 T 31N R 12W
 STATE New Mexico PARISH San Juan COUNTY San Juan

 MEASUREMENTS TAKEN FROM TOP OF OIL STRING ELEV. CORE DESCRIBED BY
TOP OF ROTARY TABLE K.B. ELEV. 6084' TITLE
GRD. OR MAT ELEV. 6072'

DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
4853	4854		Core #2		Ss, f grn, glaucic, w/occ small vert fracs, dns & non-calc.
4854	4855				Ss, as above.
4855	4856				Ss, as above.
4856	4857				Ss, as above.
4857	4858				Ss, f grn, slt & pepper, glauc, tite.
4858	4859				Ss, as above w/some horiz fracs.
4859	4860				Ss, as above, no visible fracs.
4860	4861				Ss, f grn, dk gry, sli frac, tite.
4861	4862				Ss, as above, no visible fracs.
4862	4863				Ss, as above.
4863	4864				Ss, as above.
4864	4865				Ss, as above.
4865	4866				Ss, as above.
4866	4867				Ss, as above.
4867	4868				Ss, as above.
4868	4869				Ss, as above.
4869	4870				Ss, as above.
4870	4871				Ss, as above.
4871	4872				Ss, as above.
4872	4873				Ss, as above.
4873	4874				Ss, as above.

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WELL NO. 1 LEASE Government BLOCK SEC. 20 T 31N R 12W
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MEASUREMENTS
TAKEN FROM { TOP OF OIL SPRING ELEV. _____
TOP OF ROTARY TABLE K.B. ELEV. 6084'
GRD. OR MAT ELEV. 6072'

CORE DESCRIBED BY _____

TITLE _____

DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
4874	4875		Core #2		Ss, f grn, slt & pepper, tite, non-calc, sli mica, w/occ thin sh incls & some horiz fracs along sh breaks.
4875	4876				Ss, as above, w/some thin, short vert fracs & horiz fracs.
4876	4877				Sltstn, v shly, blk, non-calc.
4877	4878				Ss, f grn, lt gry, calc cement, slt & pepper, sli mica, dns w/no visible fracs.
4878	4879				Ss, as above, non-calc w/some v f sh parts.
4879	4880				Ss, as above.
4880	4881				Sandstone, as above.
4881	4882				Ss, as above.
4882	4883				Ss, as above, gry, dns.
4883	4884				Ss, as above.
4884	4885				Ss, as above.
4885	4886				Ss, as above.
4886	4887				Ss, as above, no mica.
4887	4887.5				Ss, as above.
4887.5	4888				Sh, blk fiss.
4888	4889				Ss, gry, f grn, calc, sli mica, no visible fracs.
4889	4890				Ss, v f grn, gry, non-calc, grading to sh, blk, fiss.
4890'	4921'	31'	Core #3	26'	
4890	4891				Sltstn, dk gry, w/v thin stks, blk sh & occ incls of carbonaceous material.
4891	4892				Sh, blk, w/interbd blk sltstn.

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ELEV. _____

MEASUREMENTS
TAKEN FROM

TOP OF OIL STRING _____ ELEV. _____
TOP OF ROTARY TABLE K.B. ELEV. 6084'
GRD. OR MAY _____ ELEV. 6072'

CORE DESCRIBED BY _____

TITLE _____

DEPTH TOP	T O BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
4892	4893		Core #3		Sh, as above.
4893	4894				Ss, v f grn, sli calc, w/thin intbd blk sh.
4894	4895				Sltstn, blk, qtzitic, tite.
4895	4896				Ss, v f grn, calc, dns, slt & pepper appearance w/mica.
4896	4897				Ss, as above.
4897	4898				Ss, as above, sli calc w/thin blk sh parts.
4898	4899				Ss, as above, many horiz fracs & sli calc in frac planes.
4899	4900				Ss, v f grn, calc, glauc, tite w/no visible fracs.
4900	4901				Ss, as above w/some horiz fracs.
4901	4902				Ss, as above.
4902	4903				Ss, v f grn, non-calc, gry to slt & pepper w/horiz fracs.
4903	4904				Ss, as above.
4904	4905				Ss, as above.
4905	4906				Ss, gry, v f grn, non-calc w/no visible fracs.
4906	4907				Ss, as above w/sh vert fracs.
4907	4908				Ss, as above.
4908	4909				Ss, v f grn, dk gry, intbd w/sh, blk & sltstn.
4909	4910				Sh, blk, w/intbd thin, dk gry, v f grn, non-calc ss.
4910	4911				Ss, v f grn, non-calc, gry to slt & pepper w/many horiz fracs & sli mica.
4911	4912				Ss, as above, sli calc, w/horiz fracs.
4912	4913				Ss, blk, w/thin intbds of dk gry v f grn ss, tite & non-calc.

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 TOP OF OIL STRING _____ ELEV. _____
 TOP OF ROTARY TABLE K.B. ELEV. 6084'
 GRD. OR MAY _____ ELEV. 6072'

CORE DESCRIBED BY _____
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DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
4913	4914		Core #3		Ss, v f grn w/thin intbd blk sh.
4914	4915				Sh, blk w/intbd blk sltstn.
4915	4916				Sltstn, blk w/intbd blk sh laminae.
NO RECOVERY FROM 4916' to 4921'					
4921	4947	26'	Core #4	21'	
4921	4922				Ss, v f grn, dk gry, calc, no visible fracs w/v thin intbd blk shs.
4922	4934				Sh, blk w/thin intbd ss.
4934	4942				Ss, v f grn w/intbd blk sh & sltstn, occ horiz fracs along sh parts & some vert fracs.
NO RECOVERY FROM 4942' to 4947'					
4947'	4990'	43'	Core #5	35'	
4947	4948				Ss, lt gry, f grn, calc w/horiz fracs.
4948	4949				Ss, as above.
4949	4950				Ss, as above.
4950	4951				Ss, as above.
4951	4952				Ss, as above.
4952	4953				Ss, as above, w/sh, blk, parts.
4953	4954				Ss, v f grn, dk gry w/blk sh parts.
4954	4955				Ss, as above.
4955	4956				Ss, as above, non-calc.
4956	4957				Ss, v f grn, gry, calc w/v thin blksh parts.

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ELEV. _____

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TAKEN FROM

TOP OF OIL STRING _____ ELEV. _____
TOP OF ROTARY TABLE K.B. ELEV. 6084'
GRD. OR MAY _____ ELEV. 6072'

CORE DESCRIBED BY _____

TITLE _____

DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
4957	4958		Core #5		Ss, v f grn, lt gry, non-calc.
4958	4959				Ss, v f grn, non-calc w/thin intbd blk sh.
4959	4960				Sh, blk.
4960	4961				Ss, v f grn, dk gry, non-calc.
4961	4962				Ss, v f grn, gry, calc w/horiz frags along thin blk sh parts.
4962	4963				Ss, v f grn, gry, tite, no frags, no sh, non-calc.
4963	4964				Ss, as above.
4964	4965				Ss, as above, w/thin blk sh parts.
4965	4966				Ss. as above.
4966	4967				Ss. as above.
4967	4968				Ss as above w/horiz frags along sh parts.
4968	4969				Ss, as above w/intbd blk sh.
4969	4970				Ss, f grn, dns & sli calc w/ some vert frags.
4970	4971				Sltstn, blk w/some sh.
4971	4972				Ss, v f grn, calc, gry.
4972	4973				Ss, v f grn, dk gry, calc w/sh parts.
4973	4974				Ss, as above, non-calc w/sh parts.
4974	4975				Sh, blk w/ss.
4975	4976				Ss, non-calc.
4976	4977				Sh, blk w/occ, v f grn, ss incl.
4977	4978				Ss, v f grn, dk gry & calc w/sh parts & horiz frags.

DATE March, 1957

THE OHIO OIL CO. LOG AND CORE RECORD

FIELD Blanco-Mesaverde
(La-Plata)

WELL NO. 1 LEASE Government BLOCK SEC. 20 T 31N R 12W
STATE New Mexico PARISH San Juan COUNTY San Juan

MEASUREMENTS TAKEN FROM
 TOP OF OIL STRING _____ ELEV. _____
 TOP OF ROTARY TABLE K.B. ELEV. 6084'
 GRD. OR MAT _____ ELEV. 6072'
 CORE DESCRIBED BY _____
 TITLE _____

DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
4978	4979		Core #5		Ss, v f grn, calc w/blk sh parts.
4979	4980				Ss, v f grn, calc, tite.
4980	4981				Ss, as above, gry w/blk sh parts.
4981	4982				Sltstn, gry, sli calc w/intbd blk sh.
NO RECOVERY FROM 4982' TO 4990'					
4990	5027	37'	Core #6	34'	
4990	4991				Ss, gry, sli & pepper, v f grn, some clear qtz grns, sli mica, tr glauc, sli calc, tite.
4991	4992				Ss, as above.
4992	4993				Sh, blk w/tr mica.
4993	4994				Sh, as above w/tr pyrite.
4994	4995				Ss, as before.
4995	4996				Ss, as before.
4996	4997				Ss, as before.
4997	4998				Ss, as before w/thin intbd stringers blk sh.
4998	4999				Ss, as described at 4990'.
4999	5000				Ss, as above.
5000	5001				Ss, as above.
5001	5002				Sh, blk w/intbd f grn ss.
5002	5003				Ss, gry, f to vfg, stn mica, tr blauc, calc, tite.
5003	5004				Ss, as above w/intbd stringers blk sh.
5004	5005				Ss, as described at 5002'.

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 STATE New Mexico PARISH San Juan COUNTY San Juan

MEASUREMENTS
 TAKEN FROM { TOP OF OIL STRING _____ ELEV. _____
 TOP OF ROTARY TABLE K.B. ELEV. 6084'
 GRD. OR MAT _____ ELEV. 6072'

CORE DESCRIBED BY _____
 TITLE _____

DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
5005'	5006'		Core #6		Ss, as above.
5006	5007				Ss, as above w/blk sh strks.
5007	5008				Ss, as described at 5002'.
5008	5009				Ss, as described above.
5009	5010				Ss, as above.
5010	5011				Ss, as above.
5011	5012				Ss, gry, vfg, s-a to s-r, clear qtz grns w/numerous iron-mag min which give a slt & pepper appearance, sli mica, tr glauc, sli calc, tite.
5012	5013				Ss, as above.
5013	5014				Ss, as above.
5014	5015				Ss, as above.
5015	5018				Ss, as above.
5018	5019				Ss, as above, w/thin laminae blk sh.
5019	5020				Ss, as at 5011', becoming more calc.
5020	5021				Ss, as above, gray to dk gry, v calc.
5021	5022				Ss, as above.
5022	5024				Ss, as above, w/thin stringer blk sh.
5024	5027				NO RECOVERY
5027	5046	19'	Core #7	18'	
5027	5028				Sltstn, blk w/intbd blk sh & some vf ss.

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 STATE New Mexico PARISH San Juan COUNTY San Juan

MEASUREMENTS
 TAKEN FROM
 TOP OF OIL STRING _____ ELEV. _____
 TOP OF ROTARY TABLE K.B. ELEV. 6084'
 GRD. OR MAT _____ ELEV. 6072'

CORE DESCRIBED BY _____

TITLE _____

DEPTH TOP	T O BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
5028	5029		Core #7		Sh, blk, slty.
5029	5030				Sh, as above.
5030	5031				Ss, vfg w/thin sh strks.
5031	5032				Ss, as above.
5032	5033				Sh, blk w/vfg dk gry ss strgrs.
5033	5034				Sh, blk sdy.
5034	5035				Sh, as above.
5035	5036				Ss, lt gry, vfg, calc, tite.
5036	5037				Ss, as above, some horiz frags, sli calc, tite.
5037	5038				Ss, as above, horiz frags, non-calc tite.
5038	5039				Ss, vfg, lt gry, cacl, tite.
5039	5040				Ss, vfg, gry, non-calc w/intbd blk sh.
5040	5041				Ss, gry-blk, as above w/blk sh laminae.
5041	5042				Sh, blk, w/thin vfg gry ss intbd & horiz frags.
5042	5043				Ss, vfg, gry w/many horiz frags.
5043	5044				Ss, as above, calc, w/few horiz frags.
5044	5045				Ss, as above.
5046	5065	19'	Core #8	14'	
5046	5047				Ss, gry, fg.
5047	5048				Ss, fg & intbd blk slty sh.
5048	5049				Ss, fg, dk gry w/thin shales.

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STATE New Mexico PARISH San Juan
COUNTY San Juan

MEASUREMENTS TAKEN FROM
 TOP OF OIL STRING _____ ELEV. _____
 TOP OF ROTARY TABLE K.B. ELEV. 6084'
 GRD. OR MAT _____ ELEV. 6072'
 CORE DESCRIBED BY _____
 TITLE _____

DEPTH TOP	T O BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
5049	5050		Core #8		Sh., blk.
5050	5051				Ss, vfg, dk gry w/intbd blk sh stringer.
5051	5052				Ss, as above.
5052	5053				Ss, fg, gry, non-calc w/thin sh strks.
5053	5054				Ss, as above.
5054	5055				Ss, as above.
5055	5056				Ss, as above.
5056	5057				Sh, blk w/thin fg ss.
5057	5058				Ss, as above, intbd blk sh.
5058	5059				Ss, as above.
5059	5060	(NO RECOVERY FROM 5060'-5065')			Ss, as above, slty.
5065	5097	32'	Core #9	32'	
5065	5066				Sh, blk, sli mica w/tr pyr.
5066	5067				Sh, as above.
5067	5068				Sh, as above, w/thin stringers vfg.ss.
5068	5069				Ss, gry, vfg, mostly clear qtz grains w/an abundance Fe-Mag min which give a slt & pepper appearance, tr mica, tr blauc, sli calc, tite. Intbd blk sh & vfg ss.
5069	5070				
5070	5071				Ss, as described at 5068'.
5071	5075				Ss, as above.
5075	5076				Ss, as above.

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FIELD Blanco-Mesaverde
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 STATE New Mexico PARISH San Juan COUNTY San Juan

MEASUREMENTS TAKEN FROM
 TOP OF OIL STRING _____ ELEV. _____
 TOP OF ROTARY TABLE K.B. ELEV. 6084'
 GRD. OR MAT _____ ELEV. 6072'

CORE DESCRIBED BY _____
 TITLE _____

DEPTH TOP	TO BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
5076'	5077'	32'	Core #9	32'	Sh, blk w/tr pyr, intbd, w/vfg ss.
5077	5079				Ss, as at 5068' w/flecks, carbonaceous material.
5079	5080				Ss, as at 5068' w/laminae of blk sh.
5080	5081				Ss, as above.
5081	5082				Ss, as above.
5082	5083				Ss, as at 5068'.
5083	5084				Ss, as above, w/intbd blk sh.
5084	5085				Sh, blk, w/intbd vfg ss.
5085	5086				Ss, as at 5068' w/thin stringers blk sh.
5086	5087				Ss, as above.
5087	5088				Ss, as above w/thin lamnae blk sh.
5088	5089				Ss, as above.
5089	5090				Ss, as above.
5090	5091				Ss, as above.
5091	5092				Ss, dk gry w/intbd blk sh.
5092	5093				Sh, blk w/thin stringers vfg ss.
5093	5094				Sh, as above.
5094	5095				Ss, dk gry, vfg, mica, sli calc, tite.
5095	5096				Ss, as above.
5096	5097				Sh, blk, mica w/carbonaceous flecks w/intbd thin stringers vfg ss.
5097'	5115'	18'	Core #10	17.5'	

DATE March, 1957

THE OHIO OIL CO. LOG AND CORE RECORD

 FIELD Blanco-Mesaverde
(La-Plata)

 WELL NO. 1 LEASE Government BLOCK SEC. 20 T 31N R 12W
 STATE New Mexico PARISH San Juan COUNTY San Juan

 MEASUREMENTS TAKEN FROM TOP OF OIL STRING ELEV. CORE DESCRIBED BY
TOP OF ROTARY TABLE K.B. ELEV. 6084' TITLE
GRD. OR MAT ELEV. 6072'

DEPTH TOP	T O BOTTOM	THICKNESS	DRILLED OR CORED	RECOVERY	DESCRIPTION
5097'	5098'	18'	Core #10	17.5'	Ss, vfg w/intbd blksh stringers.
5098	5099				Ss, dk gry, as above.
5099	5100				Sltstn, blk w/sh.
5100	5101				Ss, vfg w/strks blk sh.
5101	5102				Ss, as above w/horiz fracs.
5102	5103				Sh, blk w/ss intbd.
5103	5104				Ss, fg w/horiz fracs, calc & sh parts.
5104	5105				Ss, as above, non-calc & few horiz fracs, some vert fracs.
5105	5106				Ss, as above, & sh, blk,
5106	5107				Ss, as above.
5107	5108				Ss, fg, calc w/abundant ferromag mins.
5108	5109				Ss, as above, lt gry w/horiz fracs.
5109	5110				Sh, blk w/ss stringers as above.
5110	5111				Ss, gry, fg w/thin sh stringers.
5111	5112				Ss, lt gry, calc, w/some vert fracs.
5112	5113				Ss, as above w/thin sh strks.
5113	5114				Sh, blk, slty & ss as above.
5114	5114.5				Sh, as above.
NO RECOVERY FROM 5114.5' TO 5115'					

M U D R E C O R D

<u>Date</u>	<u>Depth</u>		<u>Gel</u>	<u>Alkatan</u>	<u>Soda Ash</u>
	<u>From</u>	<u>To</u>			
1/13/57	3130	3304	2500#	175#	200#
1/14/57	3304	3562	3000#	250#	300#
1/17/57	4050	4072		50#	
1/18/57	4154	4175		100#	
1/19/57	4245	4308		150#	
1/20/57	4376	4418	1800#	150#	100#
1/21/57	4478	4630	1000#	150#	50#
1/22/57	4682	4740		50#	

BIT RECORD

WELL NAME & NO. Government #1 FIELD Blanco-Mesaverde BY

Date	Run No.	Name of Bit	Size	Bit No.	Serial No. of Bit	Depth		Footage	Hours Run	Remarks
						From	To			
1/8/57	RR	Reed	15"	RR		0	210	210	12	Surface hole
1/10/57	1	HTC OSC-3	8-3/4	1	97583	210	869	659	14-1/4	Dull
	1	HTC OSC-3	8-3/4	2	95945	869	1538	669	12	Dull
	1	HTC OSC-3	8-3/4	3	95930	1538	2132	594	14	Dull
	1	HTC OSC-3	8-3/4	4	85032	2132	2585	453	12-1/2	Dull
	1	HTC OSC-3	8-3/4	5	85033	2585	3051	466	19-1/4	Dull
	1	HTC OSC-3	8-3/4	6	84982	3051	3462	411	20-1/2	Dull
	1	Sec. S-4	8-3/4	7	155864	3462	3705	243	15-3/4	Dull
	1	Sec. S-4	8-3/4	8	155868	3705	3842	137	13	Dull
	1	HTC OW	8-3/4	9	59248	3842	3965	123	13-1/2	Dull
	1	HTC OW	8-3/4	10	69864	3965	4072	107	11-3/4	Dull
	1	HTC OW	8-3/4	11	69868	4072	4173	101	14-1/4	Dull
	1	HTC W7	8-3/4	12	89110	4173	4256	83	12-1/4	Dull
	1	HTC OSC-16	8-3/4	13	70130	4256	4426	170	21-3/4	Dull
	1	Sec. S-4	8-3/4	14	131878	4426	4570	144	18-3/4	Dull
	1	HTC OSC-16	8-3/4	15	17139	4570	4740	170	21-1/2	Dull
	1	HTC WTR	6-1/4	16	40863	4740	4810	70	19-3/4	Reamed from 4810-5115 Good condition
	1	DOMCO \diamond	6-1/8	1	OWA3649	4810	5115	305	34	Good condition
	1	HTC W7	4-1/4	17		Clean out bit and drilled retainers				