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FOR CONOCOPHILLIPS COMPANY SEMU # 175 LEA COUNTY, NEW MEXICO

Unit H, 23-20s-37e 2020/N & 330/E API # 30-025-39187





January 20, 2009

RECEIVED

MAY 1.4 2009 HOBBSOCD

CONOCOPHILLIPS COMPANY

Attn: DEWI LARASATI Westlake II, Room 13082 P.O. Box 2197 Houston, TX 77252-2197

Attn: DEWI LARASATI

RE: SEMU # 175

Rotary Sidewall Core Analysis

Ms. LARASATI:

The core analysis data from the above referenced well is enclosed in the following pages.

All quality control data is enclosed in a separate section of the report. The data, results, and photographic negatives will be maintained in our files for your future reference. If you have any questions regarding our results or procedures, please do not hesitate to contact us. We appreciate the opportunity to analyze the core from the above referenced well and look forward to working with you again in the future.

DISTRIBUTION

CONOCOPHILLIPS COMPANY

Attn: DEWI LARASATI
Westlake II, Room 13082
P.O. Box 2197
Houston, TX 77252-2197
3 Copies of the report with photographs and 3 CD-ROMs

CONOCOPHILLIPS COMPANY

Attn: MICHELLE NAVARRETTE 4001 Penbrook Street Odessa, TX. 79762 4 Copies of the Report and 1 CD-ROM

Sincerely,

Wayne Helms, General Manager Weatherford Laboratories

CONOCOPHILLIPS COMPANY SEMU # 175 LEA COUNTY, NEW MEXICO U.S.A. File:MD-42410





CONOCOPHILLIPS COMPANY

Attn: STUART ARCHIBALD Westlake II, Room 13028 P.O. Box 2197 Houston, TX. 77252-2197 1 Copy of the Report and 1 CD-ROM

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Attn: DONNA J. WILLIAMS 3300 N. A Street, Bldg. 6, Room 136 Midland, TX. 79705-5406 2 Copies of the Report

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Attn: TINA FOSTER
Westlake I, 6th Floor
501 Westlake Park Blvd.
Houston, TX. 77079
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NOJV GROUP

Chevron U.S.A. Production Company P.O. Box 36366 Houston, TX. 77236 1 Copy of the Report with Photographs and 1 CD-ROM

CONOCOPHILLIPS COMPANY SEMU # 175 LEA COUNTY, NEW MEXICO U.S.A. File:MD-42410





CORE ANALYSIS PROCEDURES

FOR

CONOCOPHILLIPS COMPANY

SEMU # 175

LEA COUNTY, NEW MEXICO

The Rotary Sidewalls were picked up by Weatherford Laboratories.

Gases from the Sidewalls were measured by Hot Wire Chromatography and reported in Gas Units.

A brief Lithological Description of the Sidewalls was recorded.

A description of the Fluorescence of the Sidewalls was recorded.

Ultraviolet Light Photographs were taken of the Sidewalls for a permanent record.

Natural Light Photographs were taken of the Sidewalls for a permanent record.

Composite Photographs of the Sidewall End Trims were taken under Natural and Ultraviolet Light.

The Sidewalls were extracted utilizing the Dean Stark method.

The fluids were measured by the Dean Stark method.

Porosities were measured in a Boyle's Law Porosimeter utilizing Helium.

Permeabilities were measured in a Hassler Sleeve Permeameter utilizing Nitrogen at 300 psi confining pressure.

Test samples of a known permeability were measured before and after the Sidewall permeabilities were measured.

CONOCOPHILLIPS COMPANY SEMU # 175 LEA COUNTY, NEW MEXICO U.S.A. File:MD-42410



ROTARY SIDEWALL CORE ANALYSIS



CONOCOPHILLIPS COMPANY SEMU NO. 175 LEA COUNTY, NEW MEXICO A.P.I. NUMBER : 30-025-39187

FIELD: Weir / Monument

LOCATION: 2020' FNL, 330' FEL,

Section 23, T-20-S, R-37-E

FILE NO.: MD-42410 DATE: January 22, 2009 ANALYSTS: WH, SB, JR

DEAN STARK EXTRACTION

SAMPLE	DEPTH	GRAIN	POR	PERM	SATURA	TIONS	GAS	FLUORESCENCE		The state of the s
NO.	ft	DENSITY	%	mD	Sw	So	UNITS	%		LITHOLOGY
1	2849.0	2.87	2.4	0.009	37.5	10.9	146	20	Brt gld	Ss opaq-gy vf-fgr sbrnd-sbang sslty anhyd
2	2894.0	2.82	4.8	0.204	56.3	16.8	60	40	Gld	Ss opaq-gy vf-fgr sbrnd-sbang sslty sc A/I
3	2919.0	2.80	5.1	0.011	80.6	0.0	8	0		Ss opaq-rd-brn vf-fgr sbrnd-sbang sslty sc A/I
4	3003.0	2.91	0.9	0.009	91.9	0.0	15	0		Anhy gy-bl slty sdy sc ss intrbd
5	3006.0	2.77	3.4	0.055	53.6	14.1	180	50	Brt yl-dl gld	Ss opaq-tn-brn vf-fgr sbrnd-sbang sslty sc A/I
6	3204.0	2.84	3.5	<.001	76.4	0.0	8	0		Ss opaq-tn-brn-rd vf-fgr sbrnd-sbang sslty abd A/I
7	3595.0	2.84	2.1	0.013	22.0	21.3	313	60	Brt yl-gld-bl	Dol tn-brn ssity tr ppp-sml vug sc sml A/I
8	3606.0	2.68	12.4	1.824	62.7	7.9	116	70	DI yi	Ss opaq-tn-gy vf-fgr sbrnd-sbang sslty sc slty intrbd
9	3616.0	2.83	2.1	0.011	32.5	Tr	64	10	Brt yl	Dol gy sslty sdy sc slty intrbd
10	3630.0	2.63	24.4	142.343	64.7	4.0	32	90	Di yi	Ss opaq-gy fgr sbrnd-sbang sslty
11	3680.0	2.62	22.5	66.160	69.2	3.8	34	90	DI yl	Ss opaq-gy fgr sbrnd-sbang sslty
12	3880.0	2.78	5.2	0.012	27.0	Tr	8	Tr	Brt yl	Dol gy sslty sdy sc slty intrbd
13	3923.0	2.71	12.6	0.230	17.7	24.0	453	90	Brt yl-dl gld	Ss opaq-gy vf-fgr sbrnd-sbang mod-sslty
14	3956.0	2.76	6.9	0.011	12.9	25.4	421	70	Brt yl-gld	Dol gy sslty sdy tr ppp-sml vug
15	3968.0	2.83	9.1	3.204	15.4	25.1	502	90	Brt yl	Dol tn-brn sslty ssdy sc ppp-sml vug
16	3975.0	2.84	11.7	24.988	17.0	27.7	415	90	Brt yl	Dol tn-brn ssity ssdy sc ppp-sml vug sty
17	4012.0	2.85	6.3	0.334	30.9	8.5	160	20	Brt yl	Dol tn-brn sslty ssdy sc ppp-sml vug sty
18	4015.0	2.83	7.5	0.075	37.5	13.1	193	40	Brt yl	Dol tn-brn sslty ssdy sc ppp-sml vug
19	4018.0	2.82	6.4	1.176	11.2	19.5	393	60	Brt yl-gld	Dol tn-gy sslty sc ppp-sml vug sty



ROTARY SIDEWALL CORE ANALYSIS



CONOCOPHILLIPS COMPANY SEMU NO. 175 LEA COUNTY, NEW MEXICO

A.P.I. NUMBER: 30-025-39187

FIELD : Weir / Monument

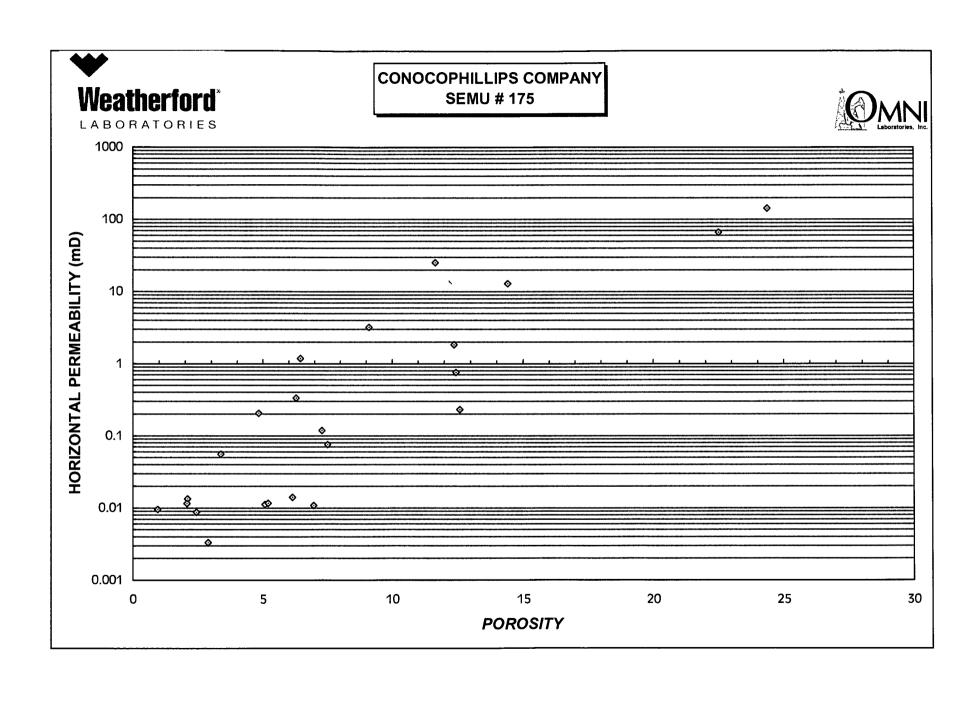
LOCATION: 2020' FNL, 330' FEL,

Section 23, T-20-S, R-37-E

FILE NO.: MD-42410 DATE: January 22, 2009 ANALYSTS: WH, SB, JR

DEAN STARK EXTRACTION

DEAN CIARN EXTRACTION										
SAMPLE	DEPTH	GRAIN	POR	PERM	SATUR	ATIONS	GAS	FLU	JORESCENCE	меринин институт в при
NO.	ft	DENSITY	%	mD	Sw	So	UNITS	%		LITHOLOGY
20	4036.0	2.84	12.4	0.756	10.5	14.3	542	70	Brt yl-gld	Dol tn-gy sslty sc ppp-sml vug s/p
21	4061.0	2.85	6.1	0.014	11.2	13.0	642	90	Brt yl	Dol tn-brn sslty tr ppp-sml vug
22	4071.0	2.85	2.9	0.003	26.6	23.1	334	90	Brt yl	Dol tn-brn sslty tr ppp-sml vug
23	4183.0	2.85	4.1	tbfa	26.5	15.4	263	40	Brt yl	Dol tn-brn sslty tr ppp-sml vug
24	4192.0	2.83	7.3	0.118	13.6	18.0	622	80	Brt yl	Dol tn-brn ssity tr ppp-sml vug
25	4213.0	2.83	14.4	12.923	11.3	18.3	289	90	Gld	Dol tn-brn-gy sslty abd sml vug







CONOCOPHILLIPS COMPANY

SEMU NO. 175 02/04/2009

QUALITY CONTROL RERUN DATA

Sample	GRAIN DENSITY		PORC	SITY	kstandard	PERME	ABILITY
No.	original	reruns	original	reruns	Test Sample	original	reruns
1	2.869	2.868	2.48	2.42			
5	2.772	2.772	3.37	3.36	2.620	0.055	0.051
8	2.684	2.683	12.41	12.37			
10	2.634	2.628	24.37	24.38		142.343	142.565
14	2.760	2.761	6.90	6.94			
16	2.838	2.838	11.67	11.66		24.988	25.368
19	2.820	2.821	6.43	6.45			
22	2.847	2.846	2.90	2.87	2.615	0.003	0.003
25	2.827	2.829	14.36	14.41			



LITHOLOGICAL ABBREVIATIONS



LABORATORIES			
Anhydrite (-ic)	anhy, anhyd	Filled	fd
Anhydrite inclusion	A/I	Fine (-ly)	f, fnly
Bentonite (-ic)	bent	Fluorescence	flu
Black (-ish)	blk, blksh	Fossil (-iferous)	foss
Bleeding Oil	B/O	Fracture	frac
Brecciated	brec	Fragments	frag
Bright	brt	Friable	fri
Brittle	brit	Fusulinid	fus
Broken	brkn	Gilsonite	gil
Brown	brn	Gold	gld
Buff	bf	Good	gd
Calcite (-ic)	calc, calctc	Grain (-s)	gr
Calcareous	calc	Granular	gran
Carbonaceous	carb	Gray	gy
Cement	cmt	Gypsum	gyp
Chalk (-y)	chk, chky	Hair line(frac)	hl
Chert	cht	Halite	hal
Clay	cl	Inclusion	incl
Coal	С	Laminations (ated)	lam
Coarse	crs	Large	Irg
Conglemerate	cgl	Light	It
Consolidated	consol	Limestone	ls
Contaminated	contam	Limey	lmy
Crinoid (-al)	crin, crinal	Lithology	lith
Cross-bedded	x-bd	Medium	m
Crystal (-line)	XI, xIn	Mineral Fluorescence	mf
Dark	dk	Moderate	mod
Dense	dns	Mudcake	m/c
Diameter	dia	No Show	N/S
Dolomite (ic)	dol, dolm	Oolite (-itic)	ool
Dull	dl	Pale	pl
Faint	fnt	Permeability	Perm, K
Fair	fr	Pin-Point Porosity	ppp

Poor	pr
Pyrite	pyr
Quartz (-itic)	qtz
Red	rd
Round	rnd
Residual Oil	So
Residual Water	Sw
Sample	Spl
Sandstone	Ss
Sandy	sdy
Scattered	sc
Shaley	shy
Shale	sh
Shale parting	s/p
Silt (-y)	slt, slty
Slight (-ly)	sli, s
Small	sml
Spotted (-y)	sp
Stringer	strgr
Stylolite (-itic)	sty, styl
Sucrosic	suc
Sulphur	su
Tan	tn
Too broken	tbfa
(for Analysis)	
Thin	thn
Trace	Tr
Very	V
Vertical	vert, vt
Vug (-gy)	vug