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### CORE ANALYSIS REPORT

FOR

#### STRATA PRODUCTION COMPANY

URRACA FEDERAL NO. 3 DIAMONDTAIL DELAWARE FIELD LEA COUNTY, NEW MEXICO



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December 12, 2006

STRATA PRODUCTION COMPANY 200 W. First Street Suite 700 Roswell, New Mexico 88201

> File No: 57181-19249 Subject: Drilled Sidewall Analysis Urraca Federal No. 3 Diamondtail Delaware Field Lea County, New Mexico

Gentlemen:

Sidewall Core Analysis was made on 19 drilled sidewall core samples received from Schlumberger.

Samples were photographed under both ultraviolet and natural light. Digital core photographs are contained on CD.

Gas expansion porosity and grain density were determined using Boyle's Law. Saturation data and cleaning was obtained using Dean Stark distillation.

Gas detection was measured using a "Hot Wire Gas Detector" on gas in the sealed containers.

Air permeability was measured horizontally on drilled sidewalls.

Descriptions and fluorescence were visually determined micro-scopically.

The samples will be returned to client.

We trust these data will be useful in the evaluation of your property and thank you for the opportunity of serving you.

Very truly yours, CORE LABORATORIES

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John Sebian Laboratory Supervisor

## CORE LABORATORIES

Company: STRATA PRODUCTION COMPANYField: DIAMONDTAIL DELAWAREFile No.: 57181-19249Icli: URRACA FEDERAL NO. 3Formation: BRUSHY CANYON DELAWAREDate: 12/11/06Icocation : 1980' FSL & 660' FWL, SEC. 11, T-23-S,R-32-ECoring Fluid: BRINE/STARCH GELAPI No. : 30-025-37687Ico,State : LEA COUNTY, NEW MEXICOElevation: 3743' KBAnalysts: SEBIAN

### CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH	INCHES REC.	PERMEABILITY (HORIZONTAL) Kair md	POROSITY (HELIUM) %	SATURATION		SATURATION					
					OIL	VOLUME) WATER	(BULK V OIL	OLUME) GAS	GRAIN DENSITY	GAS DETECTOR UNITS	DESCRIPTION	
					%	%	%	%	gm/cc			
							DRILLED SI	DEWALL AN	ALYSIS			
		• •										
1	7471.0	0.8	60.2	18.1	21.5	71.5	3.9	1.3	2.66	5.	Sd gry, tr dol,vf-f gr, 80% yel flu	
2	7496.0	1.5	63.3	16.4	4.3	92.7	0.7	0.5	2,65	0.	Sd gry, vf-f gr, 10% yel flu	
3	7500.0	1.3	3.24	12.0	6.8	90.1	0.8	0.4	2.66	0.	Sd gry, vf gr, 10% yel flu	
4	7605.0	1.4	4.85	14.2	27.0	63.9	3.8	1.3	2.66	2.	Sd gry, vf gr, 90% yel wh flu	
5	7631.0	1.4	1.38	15.5	1.5	96.2	0.2	0.4	2.66	2.	Sd gry, vf gr, lam, 0% flu tr cut	
6	7694.0	1.5	2.50	11.9	14.2	75.0	1.7	1.3	2.64	11.	Sd gry-blk, vf-f gr, sh lam, 45% yel flu	
7	7696.0	1.5	0.08	6.4	1.2	93.0	0.1	0.4	2.67		Sd gry, vf-f gr, tr calc, 0% flu sli tr cut	
8	7778.0	1.4	0.13	11.5	0.0	96.9	0.0	0.4	2.66		Sd gry, vf gr, 0% flu no cut	
9	7782.0	1.3	0.89	18.6	0.0	98.2	0.0	0.3	2.65		Sd gry, vf gr, 0% flu no cut	
10	8131.0	1.4	7.76	13.1	2.1	95.4	0.3	0.3	2.67		Sd gry, vf gr, tr% flu	
11	8172.0	1.7	<.01	6.7	14.4	74.4	1.0	0.8	2.65		Sd blk, vf gr, 10% yel flu shale oil in part	
12	8184.0	1.5	0.02	4.2	8.7	86.3	0.4	0.2	2.67		Sd dk-gry, vf gr, tr calc, 0% flu poor cut	
13	8188.0	1.7	0.01	5.7	15.4	77.4	0.9	0.4	2.67		Sd dk-gry, vf gr, lam, 5% yel flu shale oil in part	
14	8604.0	1.7	0.78	12.5	0.0	99.1	0.0	0.1	2.66		Sd gry, vf gr, 0% flu no cut	
15	.8625.0	1.0	0.20	10.7	15.8	59.1	1.7	2.7	2.72		Sd gry, vf gr, pyrt, 80% yel flu	
16	8641.0	1.0	0.19	10.6	0.0	98.5	0.0	0.2	2,66		Sd gry, vf gr, 0% flu no cut	
17	. 8662.0	1.5	1.86	13.3	1.9	98.0	0.3	0.0	2,66		Sd gry, vf gr, 0% flu tr cut	
18	8671.0	1.5	<.01	0.7	16.1	79.1	0.1	0.0	2.70		Sd dk-gry, vf-f gr, tr calc, 0% flu shale oil poor ci	
19	8678.0	1.5	0,08	3.6	19.5	80.1	0.7	0.0	2.66		Sd of gr, 0% flu shale oil fair cut	

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# CORE LABORATORIES

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## CODE KEY - DESCRIPTIONS

	<pre>= Plug from full diameter sample = Anhydrite = Appears similar to = Break = Boulder = Coarse = Calcite (areous) = Carbonaceous = Cobble = Cation exchange capacity = Cemented = Conglomerate = Chert = Coal/Coal Inclusion = Dolomite = Fine = Ironstone = Fossil (iferous) = Fracture = Friable = Glauconite (ic)</pre>	1s= Limestoneand a shale1v= Large vugsltst= Shalem= Madiumsltst= Siltstonemi= Mud invadedslty= Siltymic= MicaceousSP= Small plugmic= MicaceousSS= Sandstonemshy= Moderately shaly (20-40%)sshy= Slightly Shaly (mv= Medium vugsty= Slightly Shaly (mv= Medium vugsty= Slightly Shaly (NA= Not analysed by requestsulf= SulphurNP= No permeability measurementsv= Small vugNR= Not receivedtr= Traceool= OoliticTS= Thin sectionOB= Overburdenuncons= Unconsolidatedpbl= PeblevfracVertical fracturepbl= PeblevfracVertical dverburdePET= Removed for petrographic analysisVOB= Vertical dverburdeppv= Pinpoint Vug* Sitsvshy= Very shaly (>40%)	microscope analysis (20-40%) 20%) n sample
grn } Jyp	= Granule = Gypsum = Horizontal fracture = Halite (Salt)	ppv= Vinpoint VugVSP= Very shary (>40%)PSA= Particle size analysisVSP= Very shary (>40%)Pyr= Pyrite size analysisvug= Vuggy (ular)pyr= Pyrite (ic)ws= Water sandpyrbit = PyrobitumenXRD= X-ray diffraction	9