East Hobbs San Andres Unit CO_2 Project Economics with Piped City Effluent

Economic Assumptions		
WI Capital=	82.24%	& CO2
WI LOE=	61.68%	
NRI=	50.70%	
Oil Price=	$ 70.00	WTI
Oil Price Deduct=	4.00%	%
Oil Sev. Tax=	7.0900%	
Ad Val. Tax=	3.2123%	of rev.
CO2 Lateral Pipeline=	$ 2,984,220	gross
Tank Battery=	$ 3,040,250	gross
Recy/Wtr Inj Facility=	$16,164,289	gross
Field Inj & Gathering=	$ 7,454,756	8/8ths includes water pipeline
Well Work=	$12,970,000	8/8ths
Total Capital=	$42,613,515	8/8ths

Project Summary		
8/8 Oil Recovered=	4.642	MMBO
8/8 CO2 Injected=	84.673	BCF
8/8 CO2 Purchased=	28.506	BCF
Oil Recovery=	12.6%	Pattern OOIP
Net CO2 Util=	6.1	MCF/BO
Gross CO2 Util=	18.2	MCF/BO
PV10=	11.703	$MM
IRR=	16.4%	
Simple Payout=	8.0	Years

Incremental Performance over Existing

Date	Gross Oil Prd Rate BOPD	Net Revenue M$	WI Total OpEx M$	WI Total Capital M$	Net Cash Flow M$	Cum Cash Flow M$	10% Disc Cash Flow M$	Cum Disc Cash Flow M$
Cum	4,641,670	163,922	71,873	35,045	57,003		11,703	0
2015	0	0	0	1,646	-1,646	-1,646	-1,633	-1,633
2016	0	0	262	0	-262	-1,908	-250	-1,883
2017	0	0	867	3,214	-4,082	-5,989	-3,489	-5,372
2018	0	0	1,948	17,826	-19,775	-25,764	-15,726	-21,098
2019	451	5,579	10,191	10,710	-15,322	-41,085	-11,129	-32,227
2020	1,385	17,251	12,923	1,649	2,678	-38,407	1,671	-30,555
2021	1,883	23,418	8,655	0	14,763	-23,644	8,833	-21,723
2022	1,771	22,030	7,624	0	14,406	-9,237	7,861	-13,862
2023	1,584	19,700	6,756	0	12,944	3,706	6,409	-7,453
2024	1,382	17,237	5,037	0	12,200	15,907	5,493	-1,960
2025	1,171	14,563	3,877	0	10,685	26,592	4,383	2,423
2026	961	11,950	3,641	0	8,308	34,900	3,100	5,523
2027	751	9,343	3,577	0	5,766	40,666	1,959	7,482
2028	533	6,649	3,809	0	2,840	43,506	872	8,353
2029	360	5,100	1,287	0	3,813	47,319	1,068	9,421
2030	223	4,792	521	0	4,271	51,590	1,085	10,507
2031	148	3,611	383	0	3,227	54,817	750	11,257
2032	64	1,671	276	0	1,396	56,213	294	11,550
2033	37	1,029	239	0	791	57,003	152	11,703

Cost Estimate to Pipeline Water From the City's Effluent for 2 Years

Makeup water volume	8,600	barrels per day	
City Booster Pump	50,000	$	
Utilities ($0.02/bbl) over project life	125,560	$	
Pipeline Length	3.86	miles	
Pipeline Diameter	12	in	
Pipe Max Working Pressure	400	psi	
Pipe Material	PVC		
Pipe Unit Cost	20	$/ft	
Pipe Unit Cost to Install	45	$/ft	
Installed Pipe Cost	1,324,752	$	
Valves and Scada	50,000	$	
ROW, Damages, Permit & Survey Cost ($6/ft)	122,285	$	
Pipeline Length	0.97	miles	
Pipe Material	6" Poly		
Pipe Unit Cost, Install and ROW	21	$/ft	
Installed Pipe Cost	107,554	$	
Transfer Pump and Tank	5,000	$	
Water cost from City	0.06	$/bbl	
Water cost over project life	376,680	$	
Chemical	0.15	$/bbl	
Chemical Cost over project life	941,700	$	
Project Delay	9	months	
Supervision Cost Over Project Life	168,000	$	
Total Cost	3,271,530	$	
Tax 6.813%	222,889	$	
Grand Total	3,494,420	$ OR	0.56 $/bbl
Grand Total if shutdown 6 mos into injection	2,098,069	$ OR	1.34 $/bbl
Capital & Opex Exp for Economic Model	2,001,373	$ AND	0.24 $/bbl

BEFORE THE OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Exhibit No. 9
Submitted by: Linn Operating
Hearing Date: 7/16/2015