

STRATEGIC PETROLEUM RESEF

ENGINEERING CHANGE PROPOSAL

SUMMARY SHEET

CLASS I CHANGE

ECP NUMBER <i>SJ-11/0-4634</i>	TITLE Upgrade Valve K20-3
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BUDGET SOURCE <input type="checkbox"/> SPR BLI _____ <input type="checkbox"/> CONTRACTOR BASELINE <input type="checkbox"/> AUD <input type="checkbox"/> OTHER: Lease Contractor	AUTHORITY <input checked="" type="checkbox"/> PCCB <input type="checkbox"/> ECC
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SCHEDULE <input type="checkbox"/> YES MILESTONE NUMBER _____ CMCR NUMBER _____ <input checked="" type="checkbox"/> NO	TOTAL ESTIMATED COST OF CHANGE FY 2000 DESIGN CONSTRUCTION TOTAL \$54,312
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PCCB/ECC SIGNATURES	DISPOSITION			COMMENTS CONDITIONS/LIMITATIONS
	C O N C U R	N O N C U R	D A T E	
<i>[Signature]</i> DOE SENIOR SITE OFFICIAL				
<i>S. M. Kelly</i> APM TECHNICAL ASSURANCE	✓		3/14/04	Need Baseline Dwg ECU'd Put number data into Centre
<i>Warren Loach</i> APM SYSTEMS AND PROJECTS	✓		16 MAR 2004	
<i>[Signature]</i> APM MAINTENANCE AND OPERATIONS	✓		3/15/04	
<i>[Signature]</i> DEPUTY PROJECT MANAGER APM M&O	✓		3/17/04	
DOE CMO				
PROJECT MANAGER				
DEPUTY ASSISTANT SECRETARY - SPR				

PCCB/ECC ACTION

FULL APPROVAL
 CONDITIONAL/LIMITED APPROVAL
 DISAPPROVAL

completed 2000

STRATEGIC PETROLEUM RESERVE ENGINEERING CHANGE PROPOSAL

ECP NUMBER SJ-M/o-4634		ECP TITLE Upgrade Valve K20-3		PAGE 1 OF 4	
CONTRACTOR CHANGE NO. / REV.		INITIATED BY Richard Krebs	DATE 1/22/03	SUBMITTED BY Jill Derise	DATE 1/22/03
PRIORITY <input type="checkbox"/> EMERGENCY <input type="checkbox"/> URGENT <input checked="" type="checkbox"/> ROUTINE		ORG / CONTRACTOR Shell Pipeline Company LP	PHONE NO. (504) 728-3573	ORG/CONTRACTOR Shell Pipeline Company LP	PHONE NO. (504) 728-7366
		VALUE ENGINEERING <input type="checkbox"/> VEP (MANDATORY) <input type="checkbox"/> VECP (VOLUNTARY)	DRAWDOWN CRITICAL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ROM ESTIMATE \$ <u>54,312</u>	

DESCRIPTION:

PROBLEM / EXISTING CONFIGURATION

This ECP is being submitted as documentation of work that was done at Sugarland in 2000. Existing valve K20-3 did not provide adequate isolation to prevent contamination of crude types from occurring.

PROPOSED SOLUTION / ENHANCEMENT

Valve K20-3 was replaced with a Daniels double block and bleed valve (30", ANSI 150#, Serial #00-14-00559) with EIM motor operator (Serial #5247501, Model 5LPU-3, size 40a).

[Reference Shell AFE 149107]

REASON/JUSTIFICATION

Existing valve did not provide adequate isolation between systems. Oil loss could occur through internal valve leakage to Capline from the Discharge #2 Header and Dock #2 Header. The valve was installed in 2000 at a capital cost of \$54,312 and should be considered "unfunded liability" due to the permanent improvement to the facility.

CI'S AFFECTED

TECHNICAL ANALYSIS/RECOMMENDATION

IMPLEMENTATION METHOD

- SUBCONTRACT
- M&O LABOR (LOE)
- COMBINATION

ENGINEERING

DATE

DOE SSR

DATE

- CONCUR
- NONCONCUR

STRATEGIC PETROLEUM RESERVE

ENGINEERING CHANGE PROPOSAL

SOFTWARE, HARDWARE, FIRMWARE CHANGE

CONTRACTOR CHANGE NUMBER	REVISION NUMBER	ECP NUMBER <i>SJ-M/0-4634</i>	Page 3 of 4
SOFTWARE CHANGE ANALYSIS		HARDWARE/SOFTWARE AFFECTED	
		(NOTE: REDLINE CI BOM)	
DISPOSITION OF PARTS			
<input type="checkbox"/> REWORK SITE COMPONENTS ONLY <input type="checkbox"/> REWORK ALL SITE COMPONENTS <input type="checkbox"/> COMPONENTS NOT AFFECTED <input type="checkbox"/> OTHER (DESCRIBE) _____			
COMPONENT COMPATIBILITY (LIST COMPONENTS SEPARATELY IF COMPATIBILITIES ARE DIFFERENT)			
<input type="checkbox"/> INTERCHANGABLE <input type="checkbox"/> DRAWDOWN COMPATIBLE <input type="checkbox"/> NONCOMPATIBLE			
OPCS SUPPORT ENGINEER	DATE	FUNCTIONAL MANAGER	DATE
IMPLEMENTATION/TEST COMMENTS			
WITNESSED BY			DATE
TEST APPROVED BY	DATE	CHANGE RELEASE AUTHORITY	DATE

**STRATEGIC PETROLEUM RESERVE
ENGINEERING CHANGE PROPOSAL
CONFIGURATION CHANGE AFFECTED REPORT**

"TO BE COMPLETED BY TECHNICAL REVIEW PROCESS, ENGINEERING AND CONFIGURATION MANAGEMENT ORGANIZATION DEFINED PROCESS"

ECP NO. SJ-M/0-4634	CONTRACTOR CHANGE NO.	REV.	CHANGE CLASSIFICATION <input checked="" type="checkbox"/> CLASS I <input type="checkbox"/> CLASS II
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PAGE 4 OF 4

FUNCTIONS AFFECTED		DOCUMENTS AFFECTED	
Y	N	Y	N
	LEVEL 1 <input type="checkbox"/> II <input checked="" type="checkbox"/> III <input type="checkbox"/> CRITERIA		ELECTRICAL
	PERFORMANCE CRITERIA		315 - CATHODIC PROTECTION
	RAM		350 - STANDARDS
	INTERFACE CHARACTERISTICS		INSTRUMENTATION
	I/O POINTS		401 - BLOCK DIAGRAM
	DOE LEVEL I, II, III SCHEDULES		402 - LOOP DIAGRAMS
	GUARANTEES/DELIVERABLES		403 - INSTRUMENT PLANS AND DETAILS
	SAFETY/ENV/FP (CIRCLE ONE)		404 - INSTRUMENT WIRING DIAGRAM
	SECURITY REQUIREMENTS		409 - INSTRUMENT INDEX
	OPCS SOFTWARE		450 - STANDARDS
	OPCS HARDWARE		MAPPING
	OPCS FIRMWARE		501 - ALIGNMENT SHEETS
	RANGES/ I/O POINTS		509 - PIPELINE DWGS (MAINLINE VALVES, DRIPS, SCRAPER, TRAPS
	DIP SWITCH SETTINGS/JUMPERS		550 - STANDARDS
	MASTER CI LIST		ARCHITECTURAL
	WELLHEAD CONFIGURATION		720 - ELEVATIONS AND FLOOR PLANS
	SPARES/PROVISIONING REQUIREMENTS		750 - STANDARDS
	OPERATIONS MANUALS		DOCUMENTATION
	MAINTENANCE MANUALS		900 - RESERVED
	GOVERNMENT FURNISHED EQUIPMENT		901 - TECHNICAL/PERFORMANCE/DESIGN CRITERIA
	ENERGY USAGE		910 - DESIGN DESCRIPTION/BASIS
	VALUE ENG. (COST SAVINGS)		911 - PROCESS SET POINT DOCUMENTS
	OPERATIONS MODELS		912 - EQUIPMENT LIST
	OTHER		913 - MOV LIST
			915 - ELECTRICAL SAFETY
			920 - I/O DOCUMENT
			930 - OPERATION AND MAINTENANCE MANUALS
			950 - STANDARD SPECIFICATIONS
			970 - TASK SPECIFICATIONS
			990 - CONFIGURATION MANAGEMENT REPORTS 1.B.0.M
			999 - RESERVED
		COMMENTS:xn	
	101 - PROCESS FLOW DIAGRAMS		
	102 - MECHANICAL FLOW DIAGRAMS		
	103 - PIPING AND INSTRUMENTATION DIAGRAMS (P&ID'S)		
	104 - UTILITY FLOW DIAGRAMS		
	105 - GENERAL PIPING PLANS		
	106 - AREA PLANS (MECHANICAL EQUIPMENT LOCATION)		
	122 - WELLHEAD DRAWINGS		
	130 - VALVE LIST		
	135 - LINE LIST		
	140 - PSV LIST		
	150 - STANDARDS		
	CIVIL/STRUCTURAL		
	201 - PLOT PLANS		
	202 - SITE WORK, GRADING (ROUGH & FINISH DRAINAGE FENCING		
	210 - FOUNDATIONS: LOCATION PLANS		
	216 - MINES (WEEKS ISLAND ONLY)		
	250 - STANDARDS		
	ELECTRICAL		
	301 - AREA CLASSIFICATION		
	302 - ONE LINE DIAGRAMS		
	303 - SCHEMATIC DIAGRAMS		
	304 - POWER PLANS AND DETAILS		
	305 - LIGHTING PLANS AND DETAILS		
	307 - SUBSTATION PLANS AND DETAILS		
	308 - WIRING DIAGRAMS		
	310 - GROUNDING		
	311 - CONDUIT & CABLE SCHEDULES (INCLUDING INSTRUMENTS)		
	313 - MCC/SWITCH GEAR EVALUATION & SCHEDULE		

Engineering	DATE	CONFIGURATION MANAGEMENT	DATE
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**ENGINEERING CHANGE PROPOSAL
LIFE CYCLE COST FORM**

ECP NUMBER: <p style="text-align: center; font-size: 1.2em; margin-top: 10px;">SJ-M/O-4634</p>	ECP TITLE: Upgrade Valve K20-3						
EXECUTIVE SUMMARY: This ECP is being submitted as documentation of work that was done at Sugarland in 2000. Existing valve K20-3 did not provide adequate isolation to prevent contamination of crude types from occurring.							
IMPLEMENTATION PLAN: Valve K20-3 was replaced with a Daniels double block and bleed valve (30", ANSI 150#, Serial #00-14-00559) with EIM motor operator (Serial #5247501, Model 5LPU-3, size 40a). The valve was installed in 2000 at a capital cost of \$54,312 and should be considered "unfunded liability" due to the permanent improvement to the facility.							
IMPLEMENTATION COST: <table style="margin-left: auto; margin-right: auto; border: none;"><tr><td style="padding-right: 20px;">DESIGN:</td><td></td></tr><tr><td>CONSTRUCTION:</td><td style="text-align: right;">\$54,312</td></tr><tr><td>TOTAL:</td><td style="text-align: right;">\$54,312</td></tr></table>		DESIGN:		CONSTRUCTION:	\$54,312	TOTAL:	\$54,312
DESIGN:							
CONSTRUCTION:	\$54,312						
TOTAL:	\$54,312						
LIFE CYCLE COST: Not applicable. No foreseen upgrades or maintenance required.							
<u>IMPACT SUMMARY:</u>							
LEVEL I, II, and III CRITERIA:	CONTRACT COMPLETION DATES:						
CODES, REGULATIONS, PERMITS, ETC.:	GOVERNMENT-FURNISHED EQUIPMENT:						
SAFETY, ENVIRONMENTAL, FIRE PROTECTION SYSTEMS, SECURITY:	SCHEDULE: Installed in 2000						

Add	Save	Delete	Cancel	Find	Specs	Maint	Help	Close	Exit
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Add a new Equipment

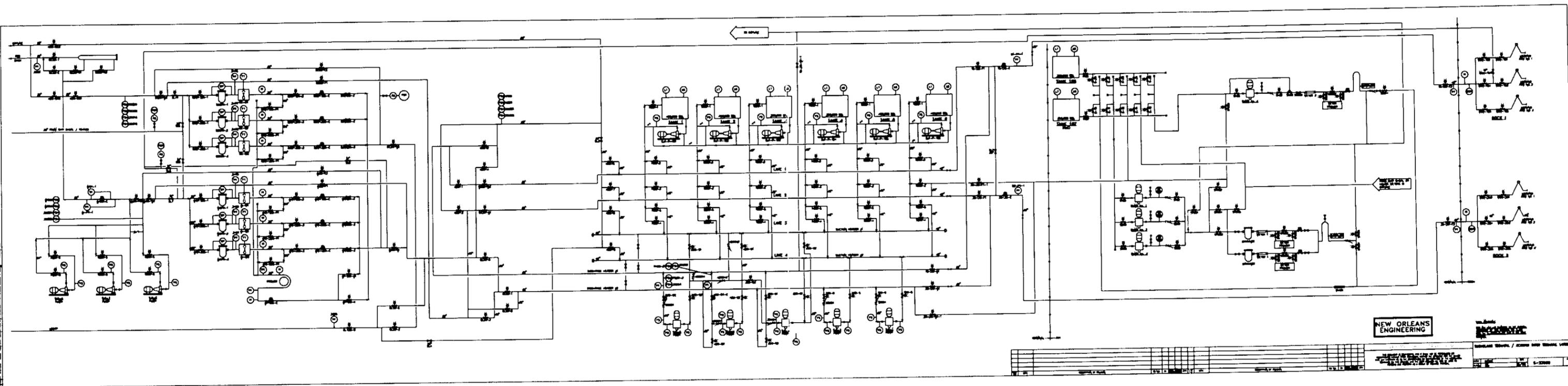
Facility:	SUGARLAND TERMINAL	Equipment Type:	VALVE - BLOCK
System:	0300	Eqpt Sub Type:	GATE
Equipment ID:	K203	Eqpt Description:	DANIEL'S

Specification Item	Specification Value
B/M - JOB NUMBER	
ELN	
SERIAL NUMBER	00-14-00559
SERIES/ANSI #	150
MANUFACTURER	DANIEL'S
SIZE	30"
TYPE SERVICE	
BONNET O-RING	
STEM PACKING	
DATE INSTALLED	
YOKE O-RING	
VALVE TYPE	
TYPE OPERATOR	
MODEL	
PACKING FOLLOWER	
PACKING RING	
CUPOLA O-RING	
SPARE PARTS	

Add	Save	Delete	Cancel	Find	Specs	Maint	Help	Close	Exit
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Facility:	SLND OPER (ELECTRIC)	Equipment Type:	VALVE OPERATOR
System:	0300	Eqpt Sub Type:	ELECTRIC
Equipment ID:	K203	Eqpt Description:	EIM

Specification Item	Specification Value
ELN	
DATE INSTALLED	
SPACE HEATER VOLTS	
SERIAL NUMBER	5247501
SPACE HEATER WATTS	
CONTROLLER	
STEM CYCLE TIME	
ORDER #	TAG#0010-5000.....10247
MANUFACTURER	EIM
RATIO	
STEM SPEED	
MODEL	5LPU-3
MOTOR DUTY TIME	
SIZE	40A



NEW ORLEANS
ENGINEERING

NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10	NO. 11	NO. 12	NO. 13	NO. 14	NO. 15	NO. 16	NO. 17	NO. 18	NO. 19	NO. 20	NO. 21	NO. 22	NO. 23	NO. 24	NO. 25	NO. 26	NO. 27	NO. 28	NO. 29	NO. 30	NO. 31	NO. 32	NO. 33	NO. 34	NO. 35	NO. 36	NO. 37	NO. 38	NO. 39	NO. 40	NO. 41	NO. 42	NO. 43	NO. 44	NO. 45	NO. 46	NO. 47	NO. 48	NO. 49	NO. 50	NO. 51	NO. 52	NO. 53	NO. 54	NO. 55	NO. 56	NO. 57	NO. 58	NO. 59	NO. 60	NO. 61	NO. 62	NO. 63	NO. 64	NO. 65	NO. 66	NO. 67	NO. 68	NO. 69	NO. 70	NO. 71	NO. 72	NO. 73	NO. 74	NO. 75	NO. 76	NO. 77	NO. 78	NO. 79	NO. 80	NO. 81	NO. 82	NO. 83	NO. 84	NO. 85	NO. 86	NO. 87	NO. 88	NO. 89	NO. 90	NO. 91	NO. 92	NO. 93	NO. 94	NO. 95	NO. 96	NO. 97	NO. 98	NO. 99	NO. 100
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