KEYSTONE XL PIPELINE PROJECT - STEELE CITY SEGMENT PIPELINE ROUTE VARIATION FORM							
VARIATION TYPE:		Refinement:			Reroute	:X	
	Centerline:	Х		Valve Site:		Pu	mp Station:
LOCATION:		Sketch:	Attach	ned	Pictures	: See attached.	
State:	SD	County:	Haakon		Quad Map	: N/A	
Township:	4N	Range:	20E			: See attached map she	et
Section:	14	_	Centerline:	11/18/2010	MP		to 450.97
REASON FOR ROUT	E VARIATION	l (Please includ	le reason for route v	variation):			
Centerline ~341 ft to the	e north which	reduces the cr	ossing length by ~1	71 ft and locates the	he centerline a	t a better crossing I	ed reroute relocates the ocation with more gentle ring waterbody near MP
DETAIL ROUTE VARI	ATION (Pleas	se describe rou	te variation in detail	).			
ADDITIONAL IMPACT The proposed reroute	<b>「S</b> (Please inc	·				<u> </u>	
Is there an increase/de					Yes	S	No X
If yes, please list: Th	e meandering	stream is cons	sidered as a minor s	stream crossing.			
COST ANALYSIS (cos	ete incurred or	cayed from th	o route variation)				
Additional length of rou			e route variation)	32 f	t.	\$ 11,466.87	\$ 360/ft
Additional length of sid					t.	\$ -	\$ 19/ft
Additional length of we				' -50 f		\$ (9,750.00)	\$ 195/ft
Additional bore length		uon.			ι. t.	\$ (92,340.00)	\$ 540/ft
Additional foreign line/p	,	nas:			τ. ΞΑ	\$ (92,340.00)	\$ 30,000/EA
Additional water body	·	•	c ).		-^	Ψ -	φ 50,000/EA
Additional water body (	Jiossing (strea	·	6.). 35 - 65' +		ΞA	\$ -	\$ 185,000/EA
			10' - 19'		EA EA		\$ 77,250/EA
			 _ess than 10'		EA EA	\$ - \$ -	\$ 77,250/EA \$ 32,500/EA
Additional survey requi	red:				-^	Ψ -	φ 32,300/EA
Additional survey requi	ieu.	Civile		0.00	milo	¢ 4045.04	¢ = 000/mile
		Civil:			mile	\$ 4,945.81	\$ 5,000/mile
		Cultural:			nile	\$ 2,472.90	\$ 2,500/mile
		Biological:		0.99r	nile	\$ 2,769.65	\$ 2,800/mile
Miscellaneous costs sa	aved or added	due to route v	ariation from ADDIT	TIONAL IMPACTS	listed above:		
Overall estimated cost	s of the route	variation:	\$		(80,435	(See "Additional	Impacts" above)

LAND / UNIVERSAL FIELD Doug Reichley  a) Is a new landowner affected by the proposed variation?  b) Is proposed realignment outside the easement/workspace?  c) Is realignment proposed to satisfy landowner request?  -If yes, name of landowner(s)/track number(s):	X	No X No X
d) Has all the evaluation criteria been examined/provided for this specific discipline?  Yes If no, please explain why:		No
ENGINEERING/CONSTRUCTION / STATE PM  a) Maximum deviation perpendicular to proposed alignment: b) Has the centerline been staked for construction? c) Does route variation affect HDD crossing alignment? d) Is realignment proposed for engineering/construction reasons? e) Will the route variation require the relocation of a pump station? f) Has all the evaluation criteria been examined/provided for this specific discipline?  Yes If no, please explain why:	X	ft.  No
ENVIRONMENTAL / EXP  Jonathan Minton  a) Has the corridor been environmentally surveyed?  b) Has the proposed variation been environmentally surveyed?  c) Was variation proposed to satisfy environmental issues?  d) Was realignment proposed to satisfy agency request?  -If yes, name of agency(s):  e) Environmental features:  Added (+):  Subtracted (-):		No NoX NoX
Wetland ID # for newly impacted wetlands:  f) Has all the evaluation criteria been examined/provided for this specific discipline?  Yes  If no, please explain why:		No
ENGINEERING / FACILITIES AND HYDRAULICS (if applicable) Sandra Gigovic  a) Will the route variation require the relocation of a pump station?  b) Will route variation impact hydraulics?  c) Are additional valves required at HCA's or water crossing?  d) Has all the evaluation criteria been examined/provided for this specific discipline?  Yes If no, please explain why:		No No No
STAKEHOLDER RELATIONS / TCPL (if applicable)  a) Does the variation result in any new stakeholders?  b) Does the variation require follow-up with specific stakeholder groups?  c) Was the variation proposed to satisfy stakeholder request?  -If yes, please specify issue type (as it aligns to stakeholder database):  d) Has all the evaluation criteria been examined/provided for this specific discipline?  Yes  If no, please explain why:		No No No
Originator: Engineering  Date: 8/9/2011		8/9/2011 Fax to: ?
Assigned Tracking Number: 0196-SD-P2-450.1-451.1-S	Filed by: Date:	Fax to: ?

he Reason for each Route Variation (RV) is given with the respective RV file. hese reroules are proposed based on aerial/pictometry/Lydar/flyover analysis of current line through Montana, South Dakota, and Nebraska.  ETALL ROUTE VARIATION (Please describe route variation in detail):  see respective Route Variation Files. No new landowners were affected by the proposed route variations.  Vs included: issuesed prior to 6/20/2011: (estern Prairie Fringe Orchid Reroute (RV-0194) - hin Harter Reroute (RV-0195)  usek Reroute (RV-0195)  issuesed during 6/20/2011 Meeting: eroute away from sidehill (SOM Land) (RV-0209)  issuesed during 6/21/2011 Meeting: eroute away from sidehill (SOM Land) (RV-0219)  P 475 Reroute (RV-020)  P 475 Reroute (RV-020)  issuesed during 6/21/2011 Meeting: eroutes to avoid vaterwell; fence (RV-0214) eroutes to avoid vaterwell; fence (RV-0215) eroutes to avoid vaterwell; fence (RV-0216) eroutes to avoid vaterwell; fence (RV-0217)  scussed during 8/10/2011 Meeting: WY 75 Reroute (RV-02196) WY 56 Reroute (RV-02196)  WY 56 Reroute (RV-02196)  WY 56 Reroute (RV-02197)  scussed during 8/10/2011 Meeting: WY 77 Reroute (RV-02197)  scussed further NDD realignment reroute (RV-0220) P 398 Reroute (RV-0219)  and River HDD realignment reroute (RV-0220) P 398 Reroute (RV-0221)  Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229)  K-MLV-06 and CK-11 Valves relocation (RV-0230)  DDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):	ARIATION TYPE:		Refinement:			Reroute:	X		
State: Multiple Township: Multiple Section: Multiple Date: 8112/2011 Section: Multiple Date: 8112/2011 Section: Multiple		Centerilne:	X		Valve Site:	X		Pump Station:	
Township: Multiple Range: Multiple Centerles: 11/18/2010 MRP See attached map sheet Section: Multiple Centerles: 11/18/2010 MRP SOURCE CENTER	OCATION:		Sketch:	Attached	Mestor III	Pictures: S	ee attached		
Section   Multiple   Cemeters   11/18/2010   MP   XOCX   to XOXX	State:	Muitiple	County: Mu	Itiple		Quad Map: N	I/A		
REASON FOR ROUTE VARIATION (Please include reason for route variation): The Reason for each Route Variation (RV) is given with the respective RV file. These reroutes are proposed based on aerial/pictometry/Lydar/flyover analysis of current line through Montana, South Dakota, and Nebraska.  DETAIL ROUTE VARIATION (Please describe route variation in detail): See respective Route Variation Files. No new landowners were affected by the proposed route variations.  EVS included: Isocussed prior to 620/2011: Research Prairie Fringe Orchid Reroute (RV-0194) Alborith frater Reroute (RV-0195) Isocussed during 620/2011 Meeting: Reroute away from aidebill (SOM Land) (RV-0209) Isocussed during 621/2011 Meeting: Reroute away from aidebill (SOM Land) (RV-0209) Isocussed during 621/2011 Meeting: Reroutes to avoid dividence (RV-0191) Isocussed during for RV-0200) Isocussed during RV-0200 (RV-0213) Isocussed during RV-0201 (RV-0213) Isocussed during RV-0201 (RV-0213) Isocussed during RV-0201 (RV-0213) Isocussed during RV-0201 (RV-0217) Isocussed during RV-0201 (RV-0218) Isocussed during RV-0201 (RV-0201 (RV-02018) Isocussed du	Township:	330	all of the same	and a second second		Total Control of State		map sheet	124,725
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See respective Route Variation Files. No new landowners were affected by the proposed route variations.  1Vs included:  1Secused prior to 6/20/2011:  Western Prairie Fringe Orchid Reroute (RV-0194)  John Harter Reroute (RV-0197)  Jiscussed during 6/20/2011 Meeting:  Reroute away from sidehili (SOM Lend) (RV-0209)  Jiscussed during 6/20/2011 Meeting:  Reroutes to avoid creek Crossings (RV-0199)  Jiscussed during 6/21/2011 Meeting:  Reroutes to avoid creek Crossings (RV-0199)  Jiscussed during 6/21/2011 Meeting:  Reroutes to avoid waterwell; fence (RV-0213)  Reroutes to avoid waterwell; fence (RV-0214)  Reroutes to avoid dreeks, dropoffs, wetlands, etc. (RV-0215)  Reroutes to avoid creeks, dropoffs, wetlands, etc. (RV-0215)  Reroutes to avoid pivot centers (RV-0217)  Jiscussed during 8/10/2011 Meeting:  WWY 3R Reroute (RV-0198)  Jiscussed during 8/10/2011 Meeting:  WWY 3R Reroute (RV-0219)  Jiscussed during 8/10/2011 Meeting:  WWY 3R Beroute (RV-0229)  Refoliowstone River HDD Entry Pt (RV-0220)  Jiscussed during 8/10/2011 Meeting:  WWY 5R Beroute (RV-0229)  Refoliowstone River HDD Entry Pt (RV-0220)  Jiscussed during 8/10/2011 Water relocation (RV-0230)  DDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  Date: 8/12/2011  Pate: 8/12/2011	5 11							and ito	Jidona.
See respective Route Variation Files. No new landowners were affected by the proposed route variations.  1Vs included:									
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AVS included:    Discussed prior to 6/20/2011:   Mostern Prairie Fringe Orchid Reroute (RV-0194)     Dohn Harler Reroute (RV-0195)     Dohn Harler Reroute (RV-0197)     Discussed during 6/20/2011 Meeting:   Reroute way from sidehili (SOM Land) (RV-0209)     Discussed during 6/21/2011 Meeting:   Reroutes to avoid creek Crossings (RV-0199)     RP 475 Reroute (RV-0200)     Reroutes to avoid drevel (RV-0213)     Reroutes to lessen/reduce Pts (RV-0213)     Reroutes to avoid stateoryealitis (RV-0214)     Reroutes to avoid stateoryealitis (RV-0215)     Reroutes to avoid stateoryealitis (RV-0217)     Discussed during 8/10/2011 Meeting:   RVY 57 Reroute (RV-0219)     Discussed during 8/10/2011 Meeting:   RVY 78 Reroute (RV-0219)     Discussed during 8/10/2011     Reveal RVY 78 Reroute (RV-0219)     Discussed during 8/10/2011     Reveal RVY 78 Reroute (RV-0219)     Discussed during 8/10/2011     Reveal RVY 78		THE RESERVE OF THE PARTY OF THE PARTY.	AND DESCRIPTION OF THE PARTY OF		he proposed to	ute variations		TWINSTON SAN	THE VEW EX
Western Prairie Fringe Orchid Reroute (RV-0194) John Harler Reroute (RV-0197)  Discussed during 6/20/2011 Meeting: Reroute away from sidehill (SOM Land) (RV-0209)  Discussed during 6/21/2011 Meeting: Reroute away from sidehill (SOM Land) (RV-0209)  Discussed during 6/21/2011 Meeting: Reroutes to avoid creek Crossings (RV-0199)  WP 476 Reroute (RV-0200)  Reroutes to lessen/reduce Pla (RV-0213) Reroutes to lessen/reduce Pla (RV-0214) Reroutes to avoid watervell; ferne (RV-0214) Reroutes to avoid creeks, dropoffs, wetlands, etc. (RV-0215) Reroutes to avoid sideslopes/hills (RV-0216) Reroutes to avoid sideslopes/hills (RV-0217)  Discussed during 8/10/2011 Meeting: HWY 73 Reroute (RV-0196) HWY 58 Reroute (RV-0196)  WP 596 Reroute (RV-0219)  Band River HDD realignment reroute (RV-0220)  WP 396 Reroute (RV-0224)  Fellowstone River HDD Entry Pt (RV-0227)  Discussed CK-11 Valves relocation (RV-0230)  ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  Originator:  Originator:  Multiple  Date:  8/12/2011  Received by:  Date:  8/12/2011	RVs included:		new landowners	andoted by t	no proposed IC	ote variations.			
John Harter Reroute (RV-0197)  Buzek Reroute (RV-0197)  Discussed during 6/20/2011 Meeting: Reroute away from sidehill (SOM Land) (RV-0209)  Discussed during 6/21/2011 Meeting: Reroutes to avoid creek Crossings (RV-0199)  MP 475 Reroute (RV-0200)  Reroutes to avoid creek Crossings (RV-0199)  Reroutes to avoid averwell; fence (RV-0214) Reroutes to avoid drevel; fence (RV-0214) Reroutes to avoid drevel; fence (RV-0215) Reroutes to avoid drevel; fence (RV-0216) Reroutes to avoid privot centers (RV-0217)  Discussed during 8/10/2011 Meeting:			oute (RV-0104)						
Discussed during 6/20/2011 Meeting: Reroute way from sidehill (SOM Land) (RV-0209) Discussed during 6/20/2011 Meeting: Reroutes to avoid creek Crossings (RV-0199) MP 475 Reroute (RV-0200) Reteroutes to avoid vaterwell; fence (RV-0213) Reroutes to avoid vaterwell; fence (RV-0213) Reroutes to avoid vaterwell; fence (RV-0214) Reroutes to avoid vaterwell; fence (RV-0217) Discussed during 8/10/2011 Meeting: Reroutes to avoid sideslopes/hillis (RV-0217) Discussed during 8/10/2011 Meeting: Reroutes to avoid sideslopes/hillis (RV-0217) Discussed during 8/10/2011 Meeting: Reroutes to avoid pivot centers (RV-0217) Discussed during 8/10/2011 Meeting: Reroutes to avoid pivot centers (RV-0217) Discussed during 8/10/2011 Meeting: Reroutes to avoid pivot centers (RV-0217) Discussed during 8/10/2011 Meeting: Reroutes to avoid pivot centers (RV-0218) Bad River HDD realignment reroute (RV-0220) RP 396 Reroute (RV-024) (reliowatione River HDD Entry Pt (RV-0220) RP 396 Reroute (RV-024) (reliowatione River HDD Entry Pt (RV-0220) RP 396 Reroute (RV-024) (reliowatione River HDD Entry Pt (RV-0220) RDDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  Discussed/decrease in the number of crossings?  Yes No  In Received by: Date:  Received by: Date: RV-018-018-018-018-018-018-018-018-018-018			/ulo (NY-V134)						
Reroute away from sidehili (SOM Land) (RV-0209)  Discussed during 6/21/2011 Meeting: Reroutes to avoid creek Crossings (RV-0199) MP 475 Reroute (RV-0200) Reroutes to lessen/reduce Pis (RV-0213) Reroutes to avoid waterwell; fence (RV-0214) Reroutes to avoid dreeks, dropoffs, wetlands, etc. (RV-0215) Reroutes to avoid sideslopes/hilis (RV-0216) Reroutes to avoid pivot centers (RV-0217)  Discussed during 8/10/2011 Meeting: HWY 73 Reroute (RV-0199) HWY 58 Reroute (RV-0219) Sad River HDD Farlignment reroute (RV-0220) MP 396 Reroute (RV-0224) Fellowstone River HDD Entry Pt. (RV-0227) Pl Breatdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230)  ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):    Ves.   Date:									
Reroute away from sidehili (SOM Land) (RV-0209)  Discussed during 6/21/2011 Meeting: Reroutes to avoid creek Crossings (RV-0199) MP 475 Reroute (RV-0200) Reroutes to lessen/reduce Pis (RV-0213) Reroutes to avoid waterwell; fence (RV-0214) Reroutes to avoid dreeks, dropoffs, wetlands, etc. (RV-0215) Reroutes to avoid sideslopes/hilis (RV-0216) Reroutes to avoid pivot centers (RV-0217)  Discussed during 8/10/2011 Meeting: HWY 73 Reroute (RV-0199) HWY 58 Reroute (RV-0219) Sad River HDD Farlignment reroute (RV-0220) MP 396 Reroute (RV-0224) Fellowstone River HDD Entry Pt. (RV-0227) Pl Breatdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230)  ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):    Ves.   Date:	Discussed during 6/2	0/2011 Meeting							
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Reroutes to avoid creek Crossings (RV-0199) MP 475 Reroute (RV-0200) Reroutes to lessen/reduce Pis (RV-0213) Reroutes to avoid waterwell; fence (RV-0214) Reroutes to avoid creeks, dropoffs, wetlands, etc. (RV-0215) Reroutes to avoid sideslopes/hills (RV-0216) Reroutes to avoid sideslopes/hills (RV-0217) Discussed during 8/10/2011 Meeting: HWY 73 Reroute (RV-0219) Bad River HDD realignment reroute (RV-0220) MP 396 Reroute (RV-0224) Fellowstone River HDD Entry Pt (RV-0227) P Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230) ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  S there an increase/decrease in the number of crossings?  I yes, please list:  Originator:  Multiple  Date:  8/12/2011  Received by:  Date:  8/12/2011  Pax to: 7	Discussed during 6/2	1/2011 Meeting:	12						
Reroutes to lessen/reduce Pis (RV-0213) Reroutes to avoid waterwell; fence (RV-0214) Reroutes to avoid reseks, dropoffs, wetlands, etc. (RV-0215) Reroutes to avoid sideslopes/hills (RV-0216) Reroutes to avoid pivot centers (RV-0217) Discussed during 8/10/2011 Meeting: 1/WY 73 Reroute (RV-0196) Bad River HDD realignment reroute (RV-0220) MP 396 Reroute (RV-0229) Bad River HDD realignment reroute (RV-0220) MP 396 Reroute (RV-0224) PI Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230) ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  S there an increase/decrease in the number of crossings?  Yes No  Originator: Multiple  Date: 8/12/2011  Received by: Date: 8/12/2011  Fax to: ?	Reroutes to avoid co	eek Crossings							
Reroutes to avoid waterwell; fence (RV-0214) Reroutes to avoid creeks, dropoffs, wetlands, etc. (RV-0215) Reroutes to avoid sideslopeshills (RV-0216) Reroutes to avoid pivot centers (RV-0217)  Discussed during 8/10/2011 Meeting:  1WY 73 Reroute (RV-0196) -1WY 73 Reroute (RV-0196) -1WY 56 Reroute (RV-0219)  Bad River HDD realignment reroute (RV-0220)  MP 396 Reroute (RV-0224) -2 Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) -2 Breakdowns of all previous RV's for new CL (RV-0228) -2 Revolute (RV-024) -3 Reroute (RV-024) -4 DDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):			0212)						
Reroutes to avoid sideslopes/hills (RV-0216) Reroutes to avoid pivot centers (RV-0217)  Discussed during 8/10/2011 Meeting:  1WY 73 Reroute (RV-0196) 1WY 56 Reroute (RV-0219) 3ad River HDD realignment reroute (RV-0220)  MP 396 Reroute (RV-0224)  Pi Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229)  CK-MLV-06 and CK-11 Valves relocation (RV-0230)  ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  S there an increase/decrease in the number of crossings?  Yes No  Originator: Multiple  Date: 8/12/2011  Received by:  Date: 8/12/2011  Fax to: ?									9
Reroutes to avoid pivot centers (RV-0217)  Discussed during 8/10/2011 Meeting:				0215)					
Discussed during 8/10/2011 Meeting:  1WY 73 Reroute (RV-0196)  1WY 56 Reroute (RV-0219)  3ad River HDD realignment reroute (RV-0220)  3dd River HDD realignment reroute (RV-0220)  3dd River HDD Entry Pt (RV-0227)  Pi Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229)  2K-MLV-06 and CK-11 Valves relocation (RV-0230)  ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  a there an increase/decrease in the number of crossings?  Yes No  Originator: Multiple  Date: 8/12/2011  Fax to: ?									
HWY 73 Reroute (RV-0196) HWY 56 Reroute (RV-0219) Bad River HDD realignment reroute (RV-0220) MP 396 Reroute (RV-0224) Veilowstone River HDD Entry Pt (RV-0227) Pl Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230) ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  So there an increase/decrease in the number of crossings?  Yes No  Originator: Multiple Date: 8/12/2011  RV-0194-0197, RV-0198-0200, RV-0209, RV-0213-0217, RV-0219-0209, RV-0219-0209, RV-0219-0209, RV-0219-0209, RV-0219-0209, RV-0219-0219, RV-0219-0209, RV-0219-0209, RV-0219-0219, RV-0219-0209, RV-0219-0219,									
HWY 56 Reroute (RV-0219)  Bad River HDD realignment reroute (RV-0220)  MP 396 Reroute (RV-0224)  (eliowstone River HDD Entry Pt (RV-0227)  Pl Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229)  CK-MLV-06 and CK-11 Valves relocation (RV-0230)  ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  s there an increase/decrease in the number of crossings?  Yes			Washington Will						
MP 396 Reroute (RV-0224) (ellowstone River HDD Entry Pt (RV-0227) Pl Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230) ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  s there an increase/decrease in the number of crossings?  Yes  No  Originator:  Multiple  Date:  8/12/2011  RV-0194-0197, RV-0199-0200, RV-0209, RV-0219-0219-0220 RV-0219-0220 RV-0219-022		100							
/eliowstone River HDD Entry Pt (RV-0227) Pt Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230)  ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):    ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):    Sthere an increase/decrease in the number of crossings?   Yes			∌ (RV-0220)						
Pl Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230)  ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  s there an increase/decrease in the number of crossings?  Yes No  f yes, please list:  Originator: Multiple  Date: 8/12/2011  Received by: Date: 8/12/2011  Fax to: ?			₹V_0227)						
ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):  s there an increase/decrease in the number of crossings?  Yes  No  Originator:  Multiple  Date:  8/12/2011  Received by:  Date:  8/12/2011  Fax to: ?	Pi Breakdowns of al	previous RV's	for new CL (RV-022	28 and RV-0229)					
S there an increase/decrease in the number of crossings?  Yes No  Originator: Multiple  Date: 8/12/2011  Received by: 8/12/2011  Fax to: ?	TO SECURITY OF THE PARTY OF THE	- CANCARD THE EN	NAME AND ADDRESS OF THE OWNER, WHEN				Part Service College	NAME OF TAXABLE PARTY.	
Originator: Multiple  Date: 8/12/2011  Received by: Date: 8/12/2011  Fax to: ?	ADDITIONAL IMPAC	rs (Please inclu	ide any additional imp	oacts which may a	ffect cost; cros	sings, induction	bends, etc.):		
Originator: Multiple  Date: 8/12/2011  Received by: Date: 8/12/2011  Fax to: ?									
Originator: Multiple  Date: 8/12/2011  Received by: Date: 8/12/2011  Fax to: ?		Will be the							
Originator: Multiple  Date: 8/12/2011  Pate: 8/12/2011  Fax to: ?  RV-0194-0197, RV-0199-0200, RV-0213-0217, RV-0219-0209, RV-0213-0217, RV-0219-0209, RV-0224, RV-0223, RV-0233-0217, RV-0219-0209, RV-0233-0217, RV-0219-0219, R	s there an increase/d	ecrease in the r	number of crossings?			Yes		No	* * * * * * * * * * * * * * * * * * * *
Originator: Multiple  Date: 8/12/2011  Date: 8/12/2011  Fax to: ?  RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-0200, RV-0213-0217, RV-0219-0210, RV-0213-0217, RV-0219-0210, RV-0213-0217, RV-0219-0210, RV-0213-0217, RV-0219-0210, RV-0213-0217, RV-0219-0217, RV-0219	yes, please list:			Commence of the second					17 AVE 11 AVE
Originator: Multiple  Date: 8/12/2011  Date: 8/12/2011  Fax to: ?  RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-0200, RV-0213-0217, RV-0219-0210, RV-0213-0217, RV-0219-0210, RV-0213-0217, RV-0219-0210, RV-0213-0217, RV-0219-0210, RV-0213-0217, RV-0219-0217, RV-0219		THE REAL PROPERTY.					- 1974 C - 1974		2800
Date: 8/12/2011	The state of the s	Multipl				10			
RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-	Originator	widitpi						With the same of the	
RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-		0110100	11				Dat		2/2011
020 RV.0224 RV.0237.0230		8/12/20							
Piled by:						12			
	Date:	F			, RV-0219-	12		4.61	

## KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT)

	KEYSTONE PIPELINE PROJECT ROUTE VARIATION	- U.S. PHASE IV (STEELE C ON AUTHORIZATION FORM	ITY SEGMENT)
Date:	8/12/2011	Tracking Number:	RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-0220, RV-0224, RV-0227-0230
John Harter Buzek Rero	airie Fringe Orchid Reroute (RV-0194) r Reroute (RV-0195) rute (RV-0197) ay from sidehii (SOM Land) (RV-0209)	Originated By:  Variation Form Attache	P: XXX.X to XXX.X Multiple
Universal Field - Land	Doug Reichl		X Rejected
Comments: 1ent	vil sur Jey	If Rejected Why?	P. A. 10/5) 11
TransCanada- Engine	ering Meera Koth	arl Variation Approved	X Rejected
Comments: and by Da meetings.	avid Guien on the 8/20 and 6/21	If Rejected Why?	Date: <u>6/20, 6/21, &amp; 8/10/11</u>
Exp - Engineering	Butch Wallac	ce Variation: Approved	X Rejected
Comments:		If Rejected Why?	Date: 6/20, 6/21, & 8/10/11
TransCanada - Constr	nuction Bobby Curbo	A STATE OF THE PARTY OF THE PAR	X Rejected
Comments:		If Rejected Why?	Date: 8/20, 6/21, & 8/10/11
Exp - Environmental	Jonathan Minto	on Variation: Approved	X Rejected
Comments:		If Rejected Why?	Date: 6/20, 6/21, & 8/10/11
AECOM - Risk Assesm	nent Heidi Tiliqui	st Variation: Approved	N/A Rejected
Comments: N/A.	A MEG (TV) (CTE)	If Rejected Why?	Date:
facilities:	Sandra Gigovi	c Variation: Approved	N/A Rejected
Comments: N/A. Does	not affect Facilities.	If Rejected Why?	Date:
ranaCanada - PM (NE	1 Robert Bradle	y Variation: Approved	X Rejected
comments:		If Rejected Why?	Date: 8/10/2011
ransCanada - Senior I	PM Alan Liet	z Variation: Approved	X Rejected
comments:	ry appropriate	If Rejected Why?	Date: 6/20, 6/21, & 8/10/11
ransCanade - Manage	Steve Mar	r Variation: Approved	Rejected
omments:	A CONTRACTOR OF THE CONTRACTOR	If Rejected	Date: 2/3////
		Why?	
orward to: Doug Reich		an Minton X	Alan Lietz X
Meera Koth Butch Walls Bobby Curb	ace X Robert	iliquist X Bradley X	Steve Marr X

Document Control Number: KXL10-00006-01-AA-180 (Form 2)

KEYSTONE XL PIPELINE PROJECT - STEELE CITY SEGMENT PIPELINE ROUTE VARIATION FORM					
1 VARIATION TYPE: Refinement: Rero	oute: X				
Centerline: X Valve Site: X	Pump Station:				
2 LOCATION: Sketch: Attached Pictu	res: See attached				
State: Multiple County: Multiple Quad M	Map: N/A				
Township: Multiple Range: Multiple Aerial M	Map: See attached map sheet				
Section: Multiple Centerline: 11/18/2010	MP: XXX.X to XXX.X				
REASON FOR ROUTE VARIATION (Please include reason for route variation):	Pump Station:  Pump S				
The Reason for each Route Variation (RV) is given with the respective RV file. These reroutes are proposed based on aerial/pictometry/Lydar/flyover analysis of current line through					
DETAIL ROUTE VARIATION (Please describe route variation in detail):					
See respective Route Variation Files. No new landowners were affected by the proposed route variations. RVs included: Discussed during 8/10/2011 Meeting: HWY 56 Reroute (RV-0196) HWY 56 Reroute (RV-0219) Bad River HDD realignment reroute (RV-0220) MP 396 Reroute (RV-0224) Yellowstone River HDD Entry Pt (RV-0227) PI Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230)					
ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):					
Is there an increase/decrease in the number of crossings?	YesNo				
If yes, please list:	3				
9	10				
9 Originator: Multiple	Received by:				
Date: 8/12/2011	10   Received by:				
11	Fax to: ?				
RV-0196, RV-0219-0220, RV-0224, RV-0227-0230 Assigned Tracking Number:	Filed by:				
. adj du Truding Turinor.	]				
	Date:   6				

<sup>\*</sup> Evaluation Criteria is located in Route Refinement and Reroute Process, Section 3

		.S. PHASE IV (STEELE CITY SEGMENT) AUTHORIZATION FORM	T <sub>R</sub>
Date:	8/12/2011	Tracking Number: RV-0196, RV-0219-0220, RV-0224, RV-0227-0230	RV-0196, RV-C
River HD: 0224); Ye of all prev	Reroute (RV-0196): HWY 56 Reroute (RV-0219): 8ad D realignment reroute (RV-0220): MP 396 Reroute (RV- Blowstone River HDD Entry Pt (RV-0227): Pl Bresidowns isous RV's for new Ct. (RV-0228 and RV-0229); CK-MLV- K-11 Valves relocation (RV-0230)	MP: XXX.X to XXX.X  Originated By: Multiple  Variation Form Attached: Yes X No	RV-0219-0220, RV-0224, RV-0227-0230
Universal Field - La Comments:	Doug Reichley	Variation: Approved X Rejected	224, RV
7em	is Survey	If Rejected Why? Dr. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	0227-0230
TransCanada- Engl Comments:	Meering Meera Kothari	Variation: Approved X Rejected  Date: 8/10/2011  If Rejected Why?	
Exp - Engineering Comments:	Butch Wallace	Vadatiog: Approved X Rejected  K. C. M. M. M. Rejected  K. C. M. M. M. Rejected  Why?  If Rejected  Why?	
TransCanada - Con Comments:	Bobby Curbow  WIND MANUTE 1.	Variation: Approved X Rejected  Date: 8/10/2011  If Rejected Why?	
Exp - Environmental Comments: Pe	Jonathan Minton	Variation: Approved X Rejected  Date: 8/10/2011  Ti Rejected	
ImnsCanada - Envi	ronmental Stephen Craycroft	Variation Administration X Rejected  Date: 8/10/2011  If Rejected ASS UMAN TO LESS Why AND ENLY RESULTS	W COMPLETED
Facilities: Comments: N/A. Do	Sandra Gigovic es not affect Facilities.	Variation: Approved N/A Rejected  Date:	0219 Hun4 56 REROUTE
TransCenada - PM () Comments:	Robert Bradley	Variation: Approved X Rejected  Date: 8/10/2011  If Rejected Why?	REROUTE
TransCanada - Senis Comments: CANO	Alan Jetz	Variation: Approved —X Rejected	
TransCanada - Mana Comments:	ger Steve Marr	Variation: Approved Rejected  Date: If Rejected	
Forward to: Doug Re Meera Ke Butch We Bobby Ci	othari X Stephen C allace X Robert Bra	raycroft X Steve Marr X	



