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LINE FTR-19-81 / APF-33-90 MIGRATION

BRITISH GAS RIMI

BG Italy

CASTEL DI LAMA
LINES: FTR-19-81 / APF-33-90
SP/VP: 100-242 / 132-594

NORTH-EAST →

MIGRATION (MERGED)

PROCESSING HISTORY

PROCESSING 10 / 60 FOLD CDP STACK	PROCESSING SAMPLE RATE 4 MS.
REFORMAT	FROM SEGY FORMAT TAPES.
EDIT OF BAD TRACES	FROM SHOT RECORD DISPLAYS AND OBSERVER LOGS.
GEOMETRY DEFINITION	STRAIGHT LINE USING SUPPLIED FIELD COORDINATES.
SPHERICAL DIVERGENCE CORRECTION	SCALAR = V**2 * T GAIN CORRECTION FTR-19-81 3DB/S LINEAR SCALAR. AP-33-90 2DB/S LINEAR SCALAR.
DATUM STATICS CORRECTION	DERIVED USING 'GMG' REFRACTION STATICS ANALYSIS. DATUM = 0.0M. REPLACEMENT VELOCITY = 2500M/S APPLIED TO FLOATING DATUM. BULK ADJUSTMENT TO MATCH ORIGINAL DATUM STATICS
SPATIAL NOTCH FILTER	LINEAR NOISE REMOVAL.
BINNING	GATHERED INTO 20 / 12.5M. BINS 10 / 60 FOLD NOMINAL
DECONVOLUTION BEFORE STACK	TYPE: PREDICTIVE GAP LENGTH: 24MS OPERATOR LENGTH: 120MS. 1.0% WHITE NOISE
DESIGN GATE FTR-19-81 20 M. 1580 M.	0.3 - 2.0 SECS. 1.8 - 4.5 SECS. 1.1 - 2.2 SECS. 2.0 - 4.5 SECS.
DESIGN GATE APF-33-90 57 M. 1562 M.	0.25 - 2.0 SECS. 1.8 - 4.5 SECS. 1.0 - 2.2 SECS. 2.0 - 4.5 SECS.
SURFACE CONSISTENT RESIDUAL STATICS	DERIVED FROM NMO CORRECTED GATHERS. 28MS MAXIMUM STATIC. SEVERAL DESIGN GATES TO ACCOMMODATE COMPLEX GEOLOGY. 3 ITERATIONS. 5,7, 9 TRACE PILOTS, AP-19-81-FR, 7,9,11 ; APF-33-90.
INTERMEDIATE VELOCITY ANALYSIS	USING 'DIVAN' 31 CDP'S PER LOCATION. 11 VARIABLE VELOCITY FUNCTIONS BETWEEN 2000-5000M/S. ANALYSIS SPACING APPROXIAMETLY 1KM. TIMES TO FLOATING DATUM.
SURFACE CONSISTENT RESIDUAL STATICS (2ND PASS)	DERIVED FROM NMO CORRECTED GATHERS. 28MS MAXIMUM STATIC. SEVERAL DESIGN GATES TO ACCOMMODATE COMPLEX GEOLOGY. 3 ITERATIONS. 13,13,13 TRACE PILOTS.
FINAL VELOCITY ANALYSIS	USING 'DIVAN' 31 CDP'S PER LOCATION. 11 VARIABLE VELOCITY FUNCTIONS BETWEEN 2000-5000M/S. ANALYSIS SPACING APPROXIAMETLY 1KM. VELOCITIES PICKED IN ASSOCIATION WITH WHOLE LINE CONSTANT VELOCITY STACKS 'SAGEVIEW'. TIMES TO FLOATING DATUM.
NOISE ATTENUATION	SHOT DOMAIN FX-DECONVOLUTION.
DIP MOVEOUT CORRECTION	KIRCHHOFF ALGORITHM. 10 OFFSET PLANES, MAX DIP 10MS/TRACE, FTR-19-81. 20 OFFSET PLANES, MAX DIP 12MS/TRACE, APF-33-90.
NORMAL MOVEOUT CORRECTION	VELOCITIES OBTAINED FROM FINAL VELOCITY ANALYSIS.
MUTE OF FIRST BREAKS & NMO STRETCH	see table below
TRACE EQUALISATION	50% OVERLAPPING BALANCE, 500MS GATES
COMMON DEPTH POINT STACK	10 / 60 FOLD NOMINAL.
POST-STACK MERGE	LINE FTR-19-81 SPATIAL RESAMPLE TO MATCH APF-33-90 CDP INTERVAL (12.5M)
FREQUENCY COMPENSATION	
COHERENCY ENHANCEMENT	RADIAL PREDICTIVE FILTER (10%-50% SIGNAL ADDBACK) - (TIME/SPACE VARIANT APPLICATION)
WAVE EQUATION MIGRATION	OMEGA-X FINITIE DIFFERENCE ALGORITHM 85%-80% SMOOTHED STACKING VELOCITIES - (TIME/SPACE VARIANT APPLICATION)
TIME VARIANT BANDPASS FILTER	see table below
TRACE EQUALISATION	50% OVERLAPPING BALANCE, 500MS GATES 0-1000MS. 1000MS GATE 1000-5000MS.
STATIC CORRECTION	FROM FLOATING DATUM TO DATUM = 0.0 M.

MUTE OF FIRST BREAKS & NMO STRETCH:

LINE FTR-19-81 OFFSET (M.)	TIME (MS.)	LINE APF-33-90 OFFSET (M.)	TIME (MS.)
20	0	45	0
350	300	80	100
850	600	240	250
1580	900	840	550
		1400	750
		1615	900

TIME VARIANT BANDPASS FILTER:

TIME (MS.)	PASSBAND (Hz.)
0 - 800	12/36 - 70/80
1000 - 2800	12 - 60
3200 - 3800	12 - 50
4200 - 5000	12 - 40

SLOPES IN dB/OCTAVE.

DISPLAY PARAMETERS

HORIZONTAL SCALE : 1:25,000 50.8 TPI VERTICAL SCALE : 5 CM/SEC

DATE: AUGUST 1999 BID NUMBER

PLOTTER: OYO THERMAL FILM DPI: 400 BIAS: 0% GAIN:0.0

POLARITY: SEG STANDARD - COMPRESSION RECORDED AS A NEGATIVE NUMBER ON TAPE (DISPLAYED AS A WHITE TROUGH)

QUALITY CONTROL : M Prescott DATE : Aug 1999

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ENGLAND

PROCESSED ON AN HP META COMPUTER USING VERITAS'S PROPRIETARY SOFTWARE